AVEO PHARMACEUTICALS INC Form DEF 14A April 30, 2019

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:

(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:

NOTICE OF 2019 ANNUAL MEETING OF STOCKHOLDERS

To Be Held on June 12, 2019

To our Stockholders:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of AVEO Pharmaceuticals, Inc. will be held on Wednesday, June 12, 2019 at 10:00 a.m., Eastern Daylight Time, at Donnelley Financial Solutions, 20 Custom House St., 7th Floor, Boston, MA 02110. 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 2020 annual meeting of stockholders;
- 2. To approve an advisory vote on executive compensation;
- 3. To approve the AVEO Pharmaceuticals, Inc. 2019 Equity Incentive Plan;
- 4. To approve an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our common stock from 250,000,000 to 500,000,000;
- 5. To approve an amendment to our Restated Certificate of Incorporation to effect a reverse stock split of our common stock, by a ratio of not less than 1-for-5 and not more than 1-for-15, and a proportionate reduction in the number of authorized shares of common stock, such ratio and the implementation and timing of the reverse stock split to be determined in the discretion of our board of directors; and
- 6. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2019.

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, 2019, 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 15, 2019, the record date for determining our stockholders entitled to notice of, and to vote at, 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 15, 2019 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 submit your proxy to cause your shares to be present and voted at the meeting in one of these three ways:

Submit a Proxy Over the Internet, by going to the website of our tabulator at www.proxypush.com/AVEO (have your Notice or proxy card in hand when you access the website);

Submit a Proxy by Telephone, by calling the toll-free number 1-866-230-6355 (have your Notice or proxy card in hand when you call); or

Submit a Proxy 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 submitted a proxy 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 submit a proxy and cause your shares to be present and voted at the annual meeting.

By Order of the Board of Directors,

Michael P. Bailey

President and Chief Executive Officer

Cambridge, Massachusetts

April 30, 2019

TABLE OF CONTENTS

| PROXY STATEMENT | 1 |
|--|----------|
| IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING | 2 |
| HOUSEHOLDING OF ANNUAL MEETING MATERIALS | 7 |
| OWNERSHIP OF OUR COMMON STOCK | 8 |
| SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE | 9 |
| PROPOSAL 1—ELECTION OF DIRECTORS | 10 |
| CORPORATE GOVERNANCE | 12 |
| General | 12 |
| Board Determination of Independence | 12 |
| Role of the Board | 13 |
| The Board's Role in Risk Oversight | 13 |
| Board of Directors Meetings and Attendance | 14 |
| Director Attendance at Annual Meeting of Stockholders | 14 |
| Board Committees | 14 |
| Director Nomination Process | 15 |
| Communicating with the Independent Directors | 16 |
| Executive Officer and Director Compensation Processes | 17 |
| Report of the Audit Committee | 17 |
| Principal Accountant Fees and Services | 18 |
| Audit Committee Pre-Approval Policies and Procedures | 18 |
| CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS | 19 |
| Policies and Procedures for Related Person Transactions | 19 |
| Related Person Transactions | 20 |
| EXECUTIVE AND DIRECTOR COMPENSATION | 21 |
| Compensation Discussion and Analysis | 21 |
| Summary Compensation Table for the Years Ended December 31, 2018, 2017 and 2016 | 36 |
| Grants of Plan-Based Awards for the Year Ended December 31, 2018 | 37 |
| Outstanding Equity Awards at December 31, 2018 | 38 |
| Option Exercises | 39 39 |
| Pay Ratio of Chief Executive Officer to Median Employee | 39 40 |
| Employment Agreements and Severance Arrangements | 40 |
| Potential Payments and Benefits Upon Termination and a Change in Control | 43 44 |
| Equity Compensation Plan Information | 44 45 |
| <u>Compensation Committee Report</u> <u>Compensation Committee Interlocks and Insider Participation</u> | 45 45 |
| Director Compensation | 45 45 |
| PROPOSAL 2—ADVISORY VOTE ON EXECUTIVE COMPENSATION | 43 |
| PROPOSAL 3— APPROVAL OF 2019 EQUITY INCENTIVE PLAN | 48 |
| Why We Are Requesting Stockholder Approval of the 2019 Equity Incentive Plan | 48 |
| Highlights of the 2019 Equity Incentive Plan | 49 |
| Information Regarding Overhang and Dilution | 49 50 |
| Description of the 2019 Equity Incentive Plan | 51 |
| <u>Federal</u> Income Tax Consequences | 59 |
| <u>redetai</u> meome rax consequences | 59 |

| PROPOSAL 4—APPROVAL OF AMENDMENT TO RESTATED CERTIFICATE OF INCORPORATION TO | |
|--|-------------|
| INCREASE THE NUMBER OF AUTHORIZED SHARES OF OUR COMMON STOCK | 61 |
| Purpose | 61 |
| Possible Effects of the Amendment | 62 |
| PROPOSAL 5-APPROVAL OF AMENDMENT TO RESTATED CERTIFICATE OF INCORPORATION TO | |
| EFFECT A REVERSE STOCK SPLIT OF OUR COMMON STOCK BY A RATIO OF NOT LESS THAN | |
| 1-FOR-5 AND NOT MORE THAN 1-FOR-15, SUCH RATIO AND THE IMPLEMENTATION AND TIMING | |
| OF THE REVERSE STOCK SPLIT TO BE DETERMINED IN THE DISCRETION OF OUR BOARD OF | |
| DIRECTORS | 63 |
| Background and Reasons for the Reverse Stock Split | 64 |
| Procedure for Implementing the Reverse Stock Split | 64 |
| Effect of the Reverse Stock Split on Holders of Outstanding Common Stock | 65 |
| Authorized Shares of Common Stock | 65 |
| Beneficial Holders of Common Stock | 65 |
| Registered "Book-Entry" Holders of Common Stock | 66 |
| Exchange of Stock Certificates | 66 |
| Fractional Shares | 67 |
| Effect of the Reverse Stock Split on Employee Plans, Options, Restricted Stock Awards and Warrants | 67 |
| Accounting Matters | 67 |
| No Appraisal Rights | 67 |
| Interest of Certain Persons in Matters to be Acted Upon | 67 |
| Material U.S. Federal Income Tax Consequences of the Reverse Stock Split | 68 |
| PROPOSAL 6—RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC | |
| ACCOUNTING FIRM | 70 |
| OTHER MATTERS | 70 |
| STOCKHOLDER PROPOSALS | 70 |
| <u>APPENDIX A</u> | A-] |
| <u>APPENDIX B</u> | B-1 |
| <u>APPENDIX C</u> | C-1 |
| | |

AVEO PHARMACEUTICALS, INC.

ONE BROADWAY, 14TH FLOOR

CAMBRIDGE, MASSACHUSETTS 02142

PROXY STATEMENT

for the 2019 Annual Meeting of Stockholders to be held on June 12, 2019

This Proxy Statement and the accompanying 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 Wednesday, June 12, 2019 at 10:00 a.m., Eastern Daylight Time, at Donnelley Financial Solutions, 20 Custom House St., 7th Floor, Boston, MA 02110, and at any adjournment thereof. Except where the context otherwise requires, references to "we," "us," "our," "our company", the "Company" and similar terms refer to AVEO Pharmaceuticals, In 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 2019 Annual Meeting of Stockholders. You may revoke your proxy at any time before it is exercised at the meeting by submitting a later dated proxy or by giving our Secretary written notice to that effect.

On or about April 30, 2019, we are mailing to our stockholders of record as of April 15, 2019 a Notice of Internet Availability of Proxy Materials instead of a paper copy of this Proxy Statement and our 2018 Annual Report to Stockholders on Form 10-K. 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 2018 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 12, 2019:

This Proxy Statement and our 2018 Annual Report to Stockholders on Form 10-K

are available for viewing, printing and downloading at www.proxydocs.com/AVEO.

A copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the Securities and Exchange Commission, or 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, 2018 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 2019 annual meeting of stockholders to be held at Donnelley Financial Solutions, 20 Custom House St., 7th Floor, Boston, MA 02110 on Wednesday, June 12, 2019 at 10:00 a.m., Eastern Daylight Time. As a stockholder of record of AVEO Pharmaceuticals, Inc., 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 2020 annual meeting of stockholders and until his successor is duly elected and qualified;

2. To approve a non-binding advisory vote on executive compensation;

3.To approve the AVEO Pharmaceuticals, Inc. 2019 Equity Incentive Plan, which we refer to as the 2019 Equity Incentive Plan;

4. To approve an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our common stock from 250,000,000 to 500,000,000;

5.To approve an amendment to our Restated Certificate of Incorporation to effect a reverse stock split of our common stock, by a ratio of not less than 1-for-5 and not more than 1-for-15, and a proportionate reduction in the number of authorized shares of common stock, such ratio and the implementation and timing of the reverse stock split to be determined in the discretion of our board of directors; and

6. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2019.

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 15, 2019, the record date for determining our stockholders entitled to vote at our annual meeting. There were 160,739,471 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.Submit a Proxy: 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 submit a proxy to cause your shares to be present and voted at the annual meeting:

(1)Submit a Proxy Over the Internet: Go to the website of our tabulator at www.proxypush.com/AVEO. Use the vote control number printed on the Notice (or your proxy card) to access your account and submit a proxy to vote your shares. You must specify how you want your shares voted or your Internet proxy 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 11, 2019, the day before the annual meeting, for your Internet proxy to be valid and your shares to be voted at the annual meeting. Your shares will be voted according to your instructions.

(2)Submit a Proxy by Telephone: Call 1-866-230-6355, 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 proxy to vote your shares as instructed at the end of the call or your telephonic proxy cannot be completed. You must submit your telephonic proxy before 11:59 p.m., Eastern Daylight Time, on June 11, 2019, the day before the annual meeting, for your telephonic proxy to be valid and your shares to be voted at the annual meeting. Your shares will be voted according to your instructions.

(3)Submit a Proxy 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 Mediant Communications, P.O. Box 8016, Cary, NC 27512-9903. Mediant Communications must receive the proxy card not later than June 11, 2019, the day before the annual meeting, for your mailed proxy to be valid and your shares to be voted at the annual meeting. 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.

Vote 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 cause your shares to be voted at the annual meeting, 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 legal proxy 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 at any time before the annual meeting. You may also revoke any previously submitted proxy by attending the annual meeting and voting in person at 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 proxy will be voted at the annual meeting. You may not revoke your previously submitted proxy over the Internet or by telephone after 11:59 p.m., Eastern Daylight Time, on June 11, 2019.

(2)Sign a new proxy and submit it by mail to Mediant Communications, P.O. Box 8016, Cary, NC 27512-9903. Mediant Communications must receive the proxy card no later than June 11, 2019. Only your latest dated proxy will be voted at the annual meeting.

(3)Attend the annual meeting and vote in person as instructed above. Attending the annual meeting alone will not revoke any previously submitted proxy.

(4)Give our corporate secretary written notice before or at the meeting that you want to revoke your previously submitted 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 legal 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 submit a proxy over the Internet, by telephone or by mail or vote 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 nominees can vote customers' shares for which they have not received voting instructions 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 considered non-discretionary. Proposal 1, the election of directors; Proposal 2, a non-binding advisory vote on executive compensation; and Proposal 3, the approval of the 2019 Equity Incentive Plan, are considered non-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 4, the approval of an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our common stock; Proposal 5, the approval of an amendment to our Restated Certificate of authorized shares of common stock; and Proposal 6, the ratification of the appointment of our independent registered public accounting

firm, are considered discretionary matters, and your bank, brokerage firm or other nominee will be able to vote on these matters 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 issued and outstanding as of the record date and entitled to vote at the meeting 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 for which a proxy has been submitted 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 (or submits a proxy with instructions to vote) to abstain or only votes (or submits a proxy with instructions to vote) 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, 2 and 3. 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 considered a non-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 holding a majority of the votes cast on the matter and voting FOR or AGAINST the proposal must vote FOR the proposal 2 is considered a non-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 firms 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 and will also not be counted as votes cast or shares voting on the proposal. As a result, "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—Approval of the 2019 Equity Incentive Plan

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 non-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 3. 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 3 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 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" and votes to ABSTAIN will have no effect on the outcome of Proposal 3.

Proposal 4—Approval of an Amendment to our Restated Certificate of Incorporation to Increase the Number of Authorized Shares of our Common Stock from 250,000,000 to 500,000,000

To approve Proposal 4, stockholders holding a majority of the outstanding shares of our common stock entitled to vote thereon must vote FOR the proposal. Proposal 4 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 shares on Proposal 4. If you ABSTAIN from voting on Proposal 4, your shares will not be voted FOR or AGAINST the proposal. Because this Proposal 4 requires an affirmative vote of the outstanding shares entitled to vote thereon, votes to ABSTAIN will effectively be counted as votes AGAINST the proposal.

Proposal 5—Approval of an Amendment to our Restated Certificate of Incorporation to Effect a Reverse Stock Split of our Common Stock, by a Ratio of Not Less Than 1-for-5 and Not More Than 1-for-15, and a Proportionate Reduction in the Number of Authorized Shares of Common Stock, Such Ratio and the Implementation and Timing of the Reverse Stock Split to be Determined in the Discretion of our Board of Directors

To approve Proposal 5, stockholders holding a majority of the outstanding shares of our common stock entitled to vote thereon must vote FOR the proposal. Proposal 5 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 shares on Proposal 5. If you ABSTAIN from voting on Proposal 5, your shares will not be voted FOR or AGAINST the proposal. Because this Proposal 5 requires an affirmative vote of the outstanding shares entitled to vote thereon, votes to ABSTAIN will effectively be counted as votes AGAINST the proposal.

Proposal 6-Ratification of Appointment of Independent Registered Public Accounting Firm

To approve Proposal 6, stockholders holding a majority of the votes cast on the matter and voting FOR or AGAINST the proposal must vote FOR the proposal. Proposal 6 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 shares on Proposal 6. If you ABSTAIN from voting on Proposal 6, 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, votes to ABSTAIN will have no effect on the outcome of Proposal 6.

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, 2019 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, 2019.

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 2020 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;

FOR the approval of the 2019 Equity Incentive Plan;

FOR the approval of an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our common stock from 250,000,000 to 500,000,000;

FOR the approval of an amendment to our Restated Certificate of Incorporation to effect a reverse stock split of our common stock, by a ratio of not less than 1-for-5 and not more than 1-for-15, and a proportionate reduction in the number of authorized shares of common stock, such ratio and the implementation and timing of the reverse stock split to be determined in the discretion of our board of directors; and

FOR the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2019.

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.

Q.What are the costs of soliciting these proxies?

A.We will bear the cost of soliciting proxies. We have retained Morrow Sodali LLC to assist us in solicitation of proxies for an aggregate fee of approximately \$7,500, plus reasonable out-of-pocket expenses. 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 to stockholders, and notices of Internet availability of proxy materials. This means that only one copy of such materials may have been sent to multiple stockholders in your household. We will

promptly deliver a separate copy of any such 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 of proxy materials 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 April 8, 2019 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 included elsewhere in this proxy statement, whom we collectively 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 in the table or in the footnotes to the table below, 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 160,739,471 shares of our common stock outstanding as of April 8, 2019. 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.

| | | Common | Common | | | |
|---|--------------|-----------------------|-------------|-----------------------------------|---------------------------|----|
| | | Stock | Stock | | | |
| | | Underlying | Underlying | | | |
| | Number of | Warrants | Options | Total | Percentag | ge |
| | Shares | Exercisable | Exercisable | Securities | of Shares Beneficially | |
| | Beneficially | Within 60 | Within 60 | Beneficially | | |
| Name and Address of Beneficial Owner Holders of more than 5% of our voting securities | Owned | Days | Days | Owned | Owned | |
| Entities affiliated with New Enterprise | 25 242 075 | 14 710 501 | | 20.054.200 | 22.0 | C1 |
| Associates ⁽¹⁾ Entities affiliated with Heights Capital | 25,243,865 | 14,710,521 | | 39,954,386 | 22.8 | % |
| Management, Inc. ⁽²⁾ | 7,826,087 | 7,826,087 | | 15,652,174 | 9.3 | % |
| Directors and Named Executive Officers | | | | | | |
| | | | | | | |
| Kenneth M. Bate | 3,750 | | 299,533 | 303,283 | * | |
| Kenneth M. Bate Anthony B. Evnin Robert C. Young | 418,523 (| ³⁾ 129,533 | , | 303,283 (4) 847,589 308,741 | * * * | |

| Gregory T. Mayes ⁽⁶⁾ | | | 8,324 | 8,324 | * | |
|---|---------|---------|-----------|-----------|-----|---|
| Michael Bailey | 168,848 | 51,813 | 2,755,498 | 2,976,159 | 1.8 | % |
| Matthew D. Dallas | | | 333,332 | 333,332 | * | |
| Michael Needle | 51,813 | 51,813 | 924,666 | 1,028,292 | * | |
| Nikhil Mehta | | | 212,499 | 212,499 | * | |
| Karuna Rubin | | | 319,893 | 319,893 | * | |
| All current executive officers and directors as | | | | | | |
| a group (9 persons) | 661,892 | 233,159 | 5,443,061 | 6,338,112 | 3.8 | % |

*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., Mohamad Makhzoumi, Josh Makower, David M. Mott, Scott D. Sandell and Peter W. Sonsini. Each of the Indirect Reporting Persons disclaims beneficial ownership of the shares held by GEO IV other than those shares which such person owns of record, and except to the extent of its or his pecuniary interest therein. The address of GEO IV is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093.
- (2) The shares are directly held by CVI Investments, Inc. and indirectly held by Heights Capital Management, Inc. The address of CVI Investments, Inc. is Heights Capital Management, Inc., 101 California Street, Suite 3250, San Francisco, CA 94111.
- (3) Consists of (a) 109 shares of common stock held by Venrock Entrepreneurs Fund Management III, LLC, or VEFM III and (b) 418,414 shares of common stock held directly by Dr. Anthony Evnin. Dr. Evnin is a partner of VR Management, LLC, an affiliate of VEFM III. Dr. Evnin expressly disclaims beneficial ownership over all shares held by or on behalf of VEFM III, except to the extent of his indirect pecuniary interest therein. The address of VEFM III is c/o Venrock Associates, 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. Mayes was appointed to our board of directors effective February 27, 2019.

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, 2018, our executive officers, directors and 10% stockholders complied with all Section 16(a) filing requirements applicable to them.

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 Mayes 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 2020 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.

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 April 8, 2019 appears above under the heading "Ownership of Our Common Stock."

Michael P. Bailey, age 53, 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. Bailev 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 68, 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., 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. and Vanda Pharmaceuticals 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, BioMarin Pharmaceutical and Vanda Pharmaceuticals.

Anthony B. Evnin, Ph.D., age 78, 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 Constellation Pharmaceuticals, Inc., both public biopharmaceutical companies, as well as Cantel Medical Corp., a public medical equipment company. He also serves on the boards of Redpin Therapeutics, Inc. and Bridge Medicines LLC, both private biopharmaceutical companies. During the last five years, Dr. Evnin served as a director of Juno Therapeutics, Inc., a public biopharmaceutical company. He has also served as a director of Acceleron Pharma, Inc., Celladon Corporation, CymaBay Therapeutics, Inc., Icagen, Inc. and Pharmos Corporation, each public biopharmaceutical companies, Altea Therapeutics Corporation, a private biopharmaceutical company, and Boston-Power, Inc., a private lithium-ion battery company. 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 and Constellation Pharmaceuticals, as well as his expertise in corporate strategy at a public biopharmaceutical company.

Gregory T. Mayes, age 50, has served as a director since February 2019. Mr. Mayes is the president and chief executive officer of Engage Therapeutics, Inc., a privately held specialty biopharmaceutical company, which he founded in January 2017. Mr. Mayes currently serves on the board of OncoSec Medical Incorporated, a public biopharmaceutical company. From 2013 to 2016, Mr. Mayes served as executive vice president and chief operating officer of Advaxis, Inc., a public biotechnology company focused on the development of immune-oncology therapies. Mr. Mayes also served on the board of Advaxis, Inc. from March 2016 to April 2017. Prior to joining Advaxis, Inc., Mr. Mayes served as executive vice president and general counsel of Unigene Laboratories, Inc. where he primarily led out-licensing efforts for its oral peptide drug delivery platform. He also served on the board of Unigene Laboratories, Inc. from 2012 to 2013. Prior to these roles, Mr. Mayes served as general counsel and chief compliance officer at ImClone Systems Corporation, a wholly owned subsidiary of Eli Lilly & Company, and as senior counsel at AstraZeneca Pharmaceuticals, LP., and practiced law at Morgan, Lewis & Bockius LLP. He holds a B.S. in advertising and political science from Syracuse University and a J.D. from the Temple University School of Law. We believe Mr. Mayes'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 79, 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, a past chairman of the board of scientific advisors of the National Cancer Institute and a past chairman of the National Comprehensive Cancer Network. Dr. Young served 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 Oklahoma 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 our company 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

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 directors and, in the case of all members of the audit committee, satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and, in the case of all members of the compensation committee, 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.

Our board of directors annually reviews the composition of our board of directors and its committees and the independence of each director. In 2019, based upon information 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. Mayes, 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 an "independent director" 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. Mayes, who comprise our compensation committee, and Drs. Evnin and Young and Mr. Mayes, 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 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, and that John H. Johnson, who served on the board and on the compensation and nominating and corporate governance committees until his

resignation in February 2019, was also independent. 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 our 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, 2018. 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 our 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 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.

Board of Directors Meetings and Attendance

Our board met thirteen times during 2018 either in person or by teleconference. During 2018, 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 2018 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 and are available on our website, www.aveooncology.com. 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 six times during 2018.

Compensation Committee

The members of our compensation committee are Kenneth Bate, Anthony Evnin, and Gregory Mayes. Dr. Evnin chairs the compensation committee. Previously, Dr. Young served on the compensation committee from May 2017 to February 2018 and Mr. Johnson served on the committee from February 2018 until his resignation from the board, subsequent to which Mr. Mayes joined the committee in February 2019. 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;

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 three times during 2018.

Nominating and Governance Committee

The members of our nominating and governance committee are Anthony Evnin, Gregory Mayes and Robert Young. Dr. Young chairs the nominating and governance committee. Previously, Mr. Bate served on the committee from May 2017 to February 2018 and Mr. Johnson served on the committee from February 2018 until his resignation from the board, subsequent to which Mr. Mayes joined the committee in February 2019. 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 2018.

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 Gregory Mayes, who has been nominated for election as a director by stockholders for the first time. During 2019, Mr. Mayes was appointed by our board as a new director. Mr. Mayes was originally proposed to the nominating and governance committee by the chief executive officer and our board of directors determined to include him among the nominees.

Criteria and Diversity

In considering whether to recommend any particular candidate for inclusion in our board's slate of recommended director nominees, our nominating and governance committee apply criteria that include the candidate's integrity, business acumen, knowledge of our business and industry, experience, absence of conflicts of interest and ability to act in the interests of all stockholders. Our nominating and governance committee also considers the board's current composition in evaluating any candidate, such as diversity of gender, race and national origin, education, professional experience and differences in viewpoints and skills. Our corporate governance guidelines specify that the value of diversity on the board should be considered by the nominating and governance committee in the director identification and nomination process. The committee does not assign specific weights to particular criteria; however, our board and nominating and governance committee believe that it is essential that the board members represent diverse viewpoints, and we are actively seeking to identify board candidates that will contribute to the diversity of the board. 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 the nominees have all had substantial achievement in their professional and personal pursuits, and possess 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 in our bylaws and described 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 our 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 our 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 equity 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, as determined by our compensation committee or the board of directors.

Our board of directors has delegated to our chief executive officer in his capacity as a director, as a committee of the board, the authority to make equity awards under our Second Amended and Restated 2010 Incentive Stock Plan to our employees and consultants (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 board and the 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, 2018, 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 2018 and 2019.

Report of the Audit Committee

Our audit committee has reviewed our audited financial statements for the year ended December 31, 2018 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 Ernst &Young LLP 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, 2018.

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

Kenneth Bate, Chair

Anthony Evnin

Robert Young

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 | 2018 | 2017 |
|---------------------------|-----------|-----------|
| Audit Fees ⁽¹⁾ | \$782,000 | \$788,000 |
| Audit-Related Fees | | |
| Tax Fees ⁽²⁾ | \$23,000 | \$23,000 |
| All Other Fees | | |
| Total Fees | \$805,000 | \$811,000 |

- (1) "Audit Fees" in each of 2018 and 2017 include 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 fees in connection with our public securities offerings, including registration statements, comfort letters and consents.
- (2)"Tax Fees" in each of 2018 and 2017 include 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 our 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 our board of directors for approval, by our compensation committee or a group of independent directors of our company performing a similar function, or (b) to a director for services as a director of our 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. 19

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 August 21, 2018, we completed a public offering of 2,500,000 shares of our common stock at the public offering price of \$2.26 per share, with total gross proceeds to us of \$5,650,000. Polar Capital, LLP and an entity affiliated with New Enterprise Associates participated in the public offering. Each of (i) Polar Capital, LLP and (ii) entities affiliated with New Enterprise Associates (collectively) beneficially held more than 5% of our voting securities at such time. Polar Capital, LLP purchased 1,327,433 shares at a total cost of \$3.0 million, and an affiliate of New Enterprise Associates purchased 663,717 shares at a total cost of \$1.5 million. In accordance with our related person transaction policy, the participation of these existing stockholders in the underwritten public offering was approved by the audit committee in connection with the offering.

On April 8, 2019, we completed a public offering of 21,739,131 shares of our common stock and warrants to purchase an aggregate of 25,000,000 shares of our common stock, including warrants to purchase an aggregate of 3,260,869 shares of our common stock sold pursuant to the underwriter's partial exercise of its overallotment option, at the public offering price of \$1.14 per share and \$0.01 per warrant, with total gross proceeds to us of \$25,032,609. An entity affiliated with New Enterprise Associates participated in this public offering by purchasing 4,347,827 shares of common stock and warrants to purchase an aggregate of 4,347,827 shares of common stock at a total cost of approximately \$5.0 million. At such time, entities affiliated with New Enterprise Associates (collectively) beneficially held more than 5% of our voting securities. In accordance with our related person transaction policy, the participation of this existing stockholder 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

 $\ensuremath{\mathbf{e}}\xspace{stablishing}$ 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 seeking to advance targeted medicines for oncology and other unmet medical needs. We are conducting a phase 3 randomized, controlled, multi-center, open-label trial, or the TIVO-3 trial, which compares tivozanib to an approved therapy, sorafenib (Nexavar®), in 350 subjects as a third- and fourth-line treatment for RCC, in order to develop and commercialize our lead candidate tivozanib in North America as a treatment for advanced or metastatic renal cell carcinoma, or RCC. We are also leveraging several collaborations in the development of tivozanib and our other product candidates. We have sublicensed tivozanib, marketed under the brand name FOTIVDA®, to EUSA Pharma (UK) Limited, or EUSA, for oncological indications in Europe and other territories outside of North America. Through EUSA, tivozanib is approved in the European Union, as well as Norway and Iceland, for the first-line treatment of adult patients with RCC and for adult patients who are vascular endothelial growth factor receptor and mTOR pathway inhibitor-naïve following disease progression after one prior treatment with cytokine therapy for RCC. We also have clinical collaborations to study tivozanib in combination with immune checkpoint inhibitors in RCC and in hepatocellular carcinoma, or HCC. We are conducting a phase 2 clinical trial of tivozanib in combination with Opdivo[®] (nivolumab), a PD-1 inhibitor, in the first-line and the second-line treatment of RCC, which we refer to as the TiNivo trial. Leveraging early monotherapy results in HCC, we have a clinical collaboration with a wholly-owned subsidiary of AstraZeneca PLC, or AstraZeneca, to study tivozanib in combination with IMFINZI® (durvalumab), a PD-L1 inhibitor, for the treatment of advanced, unresectable HCC. In addition, a new formulation of tivozanib is in pre-clinical development for the treatment of age-related macular degeneration. Ficlatuzumab, a hepatocyte growth factor inhibitory antibody, is currently being tested in several investigator-sponsored studies jointly funded by us and Biodesix, Inc., or Biodesix, for the potential treatment of squamous cell carcinoma of the head and neck, or HNSCC, acute myeloid leukemia, or AML, and pancreatic cancer. CANbridge Life Sciences Ltd., or CANbridge, our partner for AV-203, an anti-ErbB3 monoclonal antibody, is planning to initiate clinical studies in China in 2019 in esophageal squamous cell carcinoma and has committed to funding the development of AV-203 through proof-of-concept. We have recently regained the rights to AV-380, a humanized IgG1 inhibitory monoclonal antibody targeting growth differentiation factor 15, a divergent member of the TGF-ß family, for the potential treatment of cancer cachexia, and are working to initiate preclinical toxicology studies in 2019 to support the potential filing of an investigational new drug application, or IND, with the U.S. Food and Drug Administration, or the FDA. We are evaluating options for the development of our preclinical AV-353 platform which targets the Notch 3 pathway.

When making compensation decisions, the compensation committee considers the progress of the clinical and regulatory development of our product candidates and the need to retain key executives. 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 2019, 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 2018 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 2018 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 our company's approach to and structure of executive compensation. The compensation committee will continue to consider the outcome of our company's say-on-pay votes when making future compensation decisions for our named executive officers.

Our Compensation Program Emphasizes Performance

We believe that the compensation of our named executive officers for 2018 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 our 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 our company 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 considered the need to retain key executives and reward those executives who continued to perform at a high level through 2018.

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 that are named in the "Summary Compensation Table for the Years Ended December 31, 2018, 2017, and 2016", whom 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 2018 were:

Michael Bailey, our president and chief executive officer;
Matthew Dallas, our chief financial officer;
Michael Needle, our chief medical officer;
Nikhil Mehta, our senior vice president of regulatory and quality assurance; and Karuna Rubin, our senior vice president and general counsel.
22

Our compensation committee is responsible for establishing and administering our policies governing the compensation for our named executive officers, including salaries, annual 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, annual cash incentives and equity incentive compensation of certain of our named executive officers, (i) the members of our board of directors approve the salary, annual cash incentive and equity incentive compensation committee typically requests that the members of our board of directors approve the salaries of our board of directors approve the salaries, annual cash incentive compensation of all of our other named executive officers based on the compensation committee's recommendation.

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, which rewards 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, a long-term equity incentive compensation 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:

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 annual 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. 23

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 2018 and for 2019, the compensation committee also considered the extended timeline of our TIVO-3 trial, 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 for 2018 and 2019.

To assist in determining executive compensation in 2018, Radford and the compensation committee reviewed 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. 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 2019, Radford and the compensation committee reviewed a peer group, which we refer to as the 2019 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 for executive talent. The compensation committee, in consultation with members of the Radford team, included the following companies in the 2019 peer group:

| AcelRx Pharmaceuticals | Idera Pharmaceuticals | Stemline Therapeutics |
|---------------------------------|---------------------------|------------------------|
| Aldeyra Therapeutics | Karyopharm Therapeutics | Syndax Pharmaceuticals |
| BioCryst Pharmaceuticals | Kura Oncology | Syros Pharmaceuticals |
| Calithera Biosciences | Paratek Pharmaceuticals | TG Therapeutics |
| Catalyst Pharmaceuticals | Progenics Pharmaceuticals | Verastem |
| Deciphera Pharmaceuticals | Rigel Pharmaceuticals | ZIOPHARM Oncology |

In addition to the publicly available information with respect to our 2019 peer group companies, Radford gathered competitive market data from the 2018 Radford Global Life Sciences Survey of public biopharmaceutical companies with less than 100 employees and a market value between \$100 million and \$900 million, which we refer to as the 2018 Radford Global Life Sciences Survey, for our analysis of executive compensation in 2019.

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 2019.

In setting compensation for 2019, 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 own compensation for 2018 or 2019.

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 cash incentive 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 2018 and 2019, our board of directors, upon the recommendation of our compensation committee, considered the overall economic environment, the degree to which our 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 2018 and 2019, other than Mr. Bailey, our compensation committee considered the recommendations of Mr. Bailey in determining appropriate base salary levels.

2018 Base Salaries

In February 2018, 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 our company and substantial achievements of the executive officers in 2017, as well as its analysis, with input from Radford, of executive officer pay from 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 2017 Radford Global Life Sciences Survey, as recommended by Radford, in order to keep our company competitive with its peers in executive compensation. The 2018 base salaries for our named executive officers are as follows:

| | | Percentage |
|-----------------------------|------------------|-----------------|
| | | Increase in |
| | | Base Salary |
| | 2018 Annual | From 2017 |
| Name | Base Salary (\$) | 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 | N/A |
| Karuna Rubin ⁽²⁾ | \$ 300,217 | 21.3 % |

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

(2) In February 2018, Ms. Rubin was promoted to senior vice president and general counsel and, accordingly, received a salary adjustment in connection with the promotion.

2019 Base Salaries

In February 2019, our board of directors, on the recommendation of the compensation committee, established the base salaries of our named executive officers for 2019, as set forth in the table below. Radford recommended salary increases for 2019 for each of our named executive officers in order to keep our company competitive with its peers in executive compensation. However, Mr. Bailey, Mr. Dallas and Dr. Needle volunteered to forego a 2019 salary increase in order to help preserve cash for our company given the extended timeline of the TIVO-3 trial OS analysis. Our compensation committee made its recommendation taking this into consideration as well as the achievements of the executive officers in 2018, and its analysis, with input from Radford, of executive officer pay for the 2019 peer group companies described above and the 2018 Radford Global Life Sciences Survey. For our named executive officers that received salary increases for 2019, these increases were made to keep pace with the 50th percentile of comparable companies in the 2019 peer group and the 2018 Radford Global Life Sciences Survey, as recommended by Radford. The 2019 base salaries for our named executive officers are as follows:

| | | Percentage | |
|-------------------------------|------------------|-----------------|---|
| | | Increase in | |
| | | Base Salary | |
| | 2019 Annual | From 2018 | |
| Name | Base Salary (\$) | Base Salary (%) |) |
| Michael Bailey ⁽¹⁾ | \$ 527,621 | _ | % |
| Matthew Dallas ⁽¹⁾ | \$ 352,000 | | % |
| Michael Needle ⁽¹⁾ | \$ 436,578 | _ | % |
| Nikhil Mehta | \$ 434,699 | 3.5 | % |
| Karuna Rubin | \$ 345,251 | 15.0 | % |

(1)Mr. Bailey, Mr. Dallas and Dr. Needle volunteered to forego any increases to their base salaries for 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 our 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 annual 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 our 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 board of directors considers, and if they deem appropriate, approves, the recommendation of the compensation committee with respect to each of these steps. 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.

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. These target cash incentive payments were based on target cash incentives comparable to the 50th percentile of similar executives in the 2017 Radford Global Life Sciences Survey. For 2018, the target cash incentive payments and the cash incentive amounts paid for our named executive officers, taking into account the achievement of corporate goals and individual goals discussed below, were as follows:

| | | | Incentive | |
|----------------|-----------|---------------------|---------------|---|
| | 2018 | Cash | | |
| | Target | | Award as a | |
| | | Incentive | | |
| | Annual | | Percentage of | f |
| | | Award | | |
| | Cash | Paid | Target Cash | |
| | Incentive | for 2018 | Incentive | |
| Name | Award(\$) | (\$) ⁽¹⁾ | Award (%) | |
| Michael Bailey | \$290,192 | \$174,115 | 60 | % |
| Matthew Dallas | \$140,800 | \$97,152 | 69 | % |
| Michael Needle | \$174,631 | \$106,525 | 61 | % |
| | | | | |

| Nikhil Mehta | \$168,000 | \$114,240 | 68 | % |
|--------------|-----------|-----------|----|---|
| Karuna Rubin | \$90,065 | \$62,145 | 69 | % |

(1) The annual cash incentive awards for the year ended December 31, 2018 were paid in February 2019.

In addition, our board established corporate goals under the annual cash incentive program for the year ending December 31, 2018. On February 6, 2019, the board determined to award the achievement of the corporate goals at 60% of their aggregate target level. The goals as achieved in 2018 are set forth below:

| 2018 Corporate Goals | Target Sco | ore (%) A | Actual So | core (%) |
|--|------------|-----------|-----------|----------|
| Financial | C | | | |
| Raise funds through partnership and/or financing to secure funding into 2020 | 25 | % | 20 | %(1) |
| Tivozanib (TIVO-3 Success) | | | | |
| Submit NDA by the end of the year | | | | |
| Positive TiNivo study that enables initiation of new value-creating | | | | (2) |
| immunotherapy combination study (RCC or HCC) | 55 | % | 20 | % |
| Pipeline | | | | |
| Meet end-of-year enrollment goals for ficlatuzumab HNSCC study | 5 | % | 5 | %(3) |
| Business Development / Alliance Management | | | | |
| Successful monetization of AV-353 | | | | |
| Achieve AV-203 development milestone | 10 | % | 10 | % (4) |
| Corporate | | | | |
| Secure new facilities (as appropriate) | 5 | % | 5 | % (5) |
| Total | 100 | % | 60 | % |
| TIVO-3 Kicker | | | | |
| Positive TIVO-3 data (PFS statistically significant and positive OS trend) | 1.5X | Ν | I/A | (6) |

(1) Financial Runway: In 2018, we secured funding that extended our cash runway from the first quarter of 2019 into the third quarter of 2019, which was one quarter shorter than required to fully achieve the corporate goal. Our cash runway was extended through completion of a public offering of our common stock in August 2018, extension of the interest-only period under our term loan with Hercules Capital, sales of common stock under our at-the-market facility and securing of milestone payments and royalties under agreements with our partners, EUSA and CANbridge.

(2) Tivozanib Development: The topline data readout for the TIVO-3 trial was pushed back from the first quarter of 2018 to November 2018 following the slower than forecasted occurrence of progression-free survival, or PFS, events, which rendered a new drug application, or NDA, filing with the FDA, during 2018 impracticable. Furthermore, while in November 2018 we announced that the TIVO-3 trial had met its primary endpoint of improving PFS, data for the secondary endpoint of overall survival, or OS, was not mature as of the time of the final PFS analysis. In January 2019, the FDA recommended that we not submit an NDA for tivozanib at this time as the preliminary OS results from the TIVO-3 trial did not allay its OS concerns from our previously completed phase 3 trial for tivozanib in the first line treatment of RCC. Following discussion with the FDA, we have extended the timeline for the TIVO-3 trial OS analysis and plan to conduct another interim OS analysis in August 2019. While we anticipate reporting the results of this analysis in the fourth quarter of 2019, and plan to provide an update regarding the potential submission of an NDA for tivozanib to the FDA, we did not achieve this portion of the corporate goal in 2018. Our board of directors determined that we fully achieved the portion of the corporate goal related to our immunotherapy combination studies. In February 2018, we presented positive preliminary results from the TiNivo trial at the 2018 ASCO Genitourinary Cancers Symposium, and in October 2018, we presented positive updated interim results from all 25 patients treated at full dose in the TiNivo trial at the ESMO 2018 Congress. In addition, in 2018, we reported promising early results in a phase 1b/2 monotherapy study of tivozanib in first-line HCC. In December 2018, we entered into a clinical collaboration with AstraZeneca to evaluate the safety and efficacy of AstraZeneca's IMFINZI (durvalumab) in combination with tivozanib as a

first-line treatment for patients with advanced, unresectable HCC in a phase 1/2 study in which AstraZeneca will contribute the clinical supply of IMFINZI and cover half of the costs of the study.

- (3) Pipeline Ficlatuzumab Development: We and our partner, Biodesix, Inc., are currently funding investigator-sponsored trials of ficlatuzumab in HNSCC, AML, and pancreatic cancer. In 2018, patient enrollment and new site initiation in a randomized, phase 2, multicenter, investigator-initiated confirmatory trial of ficlatuzumab in HNSCC continued, but did not meet its 2018 patient enrollment target. However, in 2018, the enrollment expectation in the phase 1/2 clinical trial of ficlatuzumab in pancreatic cancer was exceeded. Accordingly, our board of directors determined that that the development of ficlatuzumab was progressing at least as much as targeted and determined to award full achievement of this corporate goal.
- (4) Business Development/Alliance Management: In August 2018, the China National Drug Administration approved CANbridge's IND application for AV-203, triggering a \$2 million milestone payment to us in satisfaction of the AV-203 portion of this corporate goal. We have continued to evaluate options for the development of our preclinical AV-353 platform, but have not monetized that program to date. However, in 2018, we regained worldwide rights to the AV-380 program from Novartis International Pharmaceutical Ltd., or Novartis, and have worked with Novartis to transition the program in a manner that facilitates our initiation of preclinical toxicology studies in 2019. In addition, in December 2018, we entered into an agreement with Novartis regarding the transition of the AV-380 program that provided for us to receive goods and payments from Novartis totaling approximately \$6 million, comprised of a \$2.3 million cash payment, as well as the transfer to us of the AV-380 drug supply, valued at approximately \$4 million, at no charge. Our board of directors determined that the business development/alliance management corporate goal was fully achieved by these developments in, and payments under, the AV-203 and AV-380 programs.
- (5) Facilities: We have maintained a lean staffing structure that has contributed to our ability to be conservative and flexible in our use of capital for our office space. For the past three years, we have leased our principal office facility, which consists of approximately 3,000 square feet of office space, under a month-to-month lease, in order to minimize exit costs should a shift in the size of our company warrant an increase or decrease in space. In 2018, we relocated to a new space within our existing building, without any change in cost or other terms of the lease. Our board of directors accordingly determined that this corporate goal was met.
- (6) TIVO-3 Data: As discussed in (2) above, although the TIVO-3 trial met its primary endpoint, demonstrating a statistically significant improvement in PFS, the trial did not show a positive OS trend at the time of the topline data readout in November 2018. While this OS analysis was preliminary, and OS data collection will continue in 2019, our board of directors determined that the conditions for the TIVO-3 kicker were not met in 2018.

For 2018, the individual goals for each of our named executive officers (other than our chief executive officer) accounted for 20% of his or her performance incentive. The annual 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.

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 investor relations.

For 2018, Dr. Needle's goals related to leading the clinical group; acting as our clinical representative in interactions with investigators, key opinion leaders, cooperative groups and partners to advance tivozanib development; completion of 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 related 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.

For 2018, Ms. Rubin's goals related to leading the legal group; assuring compliance with securities and governance matters; managing intellectual property, contracts and other corporate legal matters; and overseeing risk management compliance.

2019 Cash Incentive Program

In February 2019, the compensation committee established a target cash incentive payment for each of our named executive officers based on a percentage of their 2019 annual base salary as set forth below. These target cash incentive payments were based on target cash incentives comparable to similar executives in the 2018 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 2019 peer group set at levels that approximated the 50th percentile of target executive cash incentive compensation at those companies.

| | | Target | 2019 |
|----------------|-----------|------------|-------------|
| | | C | Target |
| | | Percentage | |
| | | | Annual |
| | | of 2019 | |
| | 2019 | | Cash |
| | Annual | Annual | |
| | | | Incentive |
| | Base | Base | |
| | Salary | Salary | Award |
| Name | (\$) | (%) | (\$) |
| Michael Bailey | \$527,621 | 55 9 | % \$290,192 |
| Matthew Dallas | \$352,000 | 40 9 | % \$140,800 |
| Michael Needle | \$436,578 | 40 % | % \$174,631 |
| Nikhil Mehta | \$434,699 | 40 % | % \$173,880 |
| Karuna Rubin | \$345,251 | 40 9 | % \$138,100 |

In February 2019, our board of directors, upon the recommendation of our compensation committee, established the following corporate goals under the annual cash incentive program for the year ending December 31, 2019, as set forth below:

2019 Corporate Goals

Percentage of Annual

Cash Incentive

Award

Attributable to

| | Corporate Goals | e |
|--|--------------------|---|
| Financial | | |
| Secure funds that enable a cash runway into 2021 | 25 | % |
| Tivozanib | | |
| Execute TIVO-3 to enable an FDA submission in 4Q2019 | | |
| Successfully complete Phase 1 (IO) combo study in HCC that enables Phase 2 | | |
| Expand clinical collaborations for IO combinations | 50 | % |
| Pipeline | | |
| Initiate animal tox study for AV-380 to enable IND or partner program | | |
| Complete BD transaction to advance or monetize pipeline asset(s) inclusive of tivozanib ocular | | |
| formulation, ficlatuzumab and AV-203 | 20 | % |
| Corporate | | |
| Maintain and motivate organizational infrastructure to achieve goals | 5 | % |
| Total | 100 | % |

The corporate goals will account for 80% of the annual cash incentive opportunity for our executive officers (other than our chief executive officer). The annual 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 2019, 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.

For 2019, Mr. Dallas's goals relate to leading the financial, IT and facilities groups; assuring corporate financial compliance and reporting; managing our financial resources; achieving financing goals; and optimizing investor relations.

For 2019, Dr. Needle's goals relate to leading the clinical group; acting as our clinical representative in interactions with investigators, key opinion leaders, cooperative groups and partners to advance the development of our product candidates; executing the TIVO-3 data analyses in preparation for a potential NDA submission to the FDA; and leading the phase 1 portion of the combination study of tivozanib and AstraZeneca's IMFINZI (durvalumab) in HCC.

For 2019, Dr. Mehta's goals relate to leading the regulatory, quality and CMC groups; leading the preparation of an NDA submission for tivozanib; supporting regulatory activities in connection with our tivozanib combination studies; leading preclinical toxicology studies to enable the filing of an IND with the FDA for AV-380; and ensuring sufficient drug supply of our product candidates.

For 2019, Ms. Rubin's goals relate to leading the legal group; assuring compliance with securities and governance matters; managing intellectual property, contracts and other corporate legal matters; and overseeing risk management compliance.

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 and 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 equity 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.

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.

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.

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 in the 2017 Radford Global Life Sciences Survey and recommended awards that approximated the 50th percentile of executive equity incentive compensation at those companies.

| | Total Number |
|-------------------------------|--------------------|
| | of Shares of |
| | Common Stock |
| | Underlying |
| | Time-Based |
| | Options Granted |
| Name | in 2018 |
| Michael Bailey | 1,000,000 |
| Matthew Dallas ⁽¹⁾ | 250,000 |
| Michael Needle | 225,000 |
| Nikhil Mehta ⁽¹⁾ | 75,000 |
| Karuna Rubin | 280,000 |
| | |

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

2018 Performance-Based Option Grants

In February 2018, in order to incentivize Mr. Dallas and Dr. Mehta to achieve a milestone for filing an NDA 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, or the 2018 performance-based options, to purchase shares of our common stock tied to the achievement of the regulatory milestone set forth below. The 2018 performance-based options granted to Mr. Dallas and Dr. Mehta 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 2018 performance-based options were to commence vesting upon our achievement of the following milestone:

Regulatory Milestone – if, at the determination of the compensation committee in its sole discretion, we have filed an 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.

In November 2018, our board of directors, upon the recommendation of our compensation committee, approved amendments to the above definition of "Regulatory Milestone" to (a) amend the deadline to file an NDA for tivozanib to account for the delay in receiving topline data from the TIVO-3 trial due to the slower than expected rate of progression free survival events, (b) shorten the time period in which to file the NDA from six months to five months from the receipt of topline data and (c) add an additional requirement that the NDA be accepted for filing by the FDA within three months following its submission by our company. The amendments were approved in order to continue to incentivize Mr. Dallas and Dr. Mehta so our company could file a well-prepared NDA in a timely matter in light of the timing of receiving the TIVO-3 trial's topline data on November 5, 2018. As amended, the definition of "Regulatory Milestone" is as follows:

Regulatory Milestone – if, at the determination of the compensation committee in its sole discretion, (i) we have filed an NDA with the FDA for tivozanib no more than five months after November 5, 2018, which is the date the topline data of the TIVO phase 3 clinical trial became available and (ii) the FDA accepts the NDA for filing no later than three months after we have filed it, and in no event later than July 30, 2019, one-half of the total number of shares underlying the performance option shall vest on the date the FDA accepts the NDA for filing and the second half will vest on February 8, 2020.

However, as we did not file an NDA for tivozanib with the FDA by April 5, 2019, this regulatory milestone was not met and the 2018 performance-based options irrevocably expired as of such date.

| | Total Number |
|--|------------------------------|
| | of Shares of |
| | Common Stock |
| | Underlying 2018 |
| | Performance |
| | -Based Options |
| Name Matthew Dallas Nikhil Mehta | (1)(2) 100,000 175,000 |
| I VIKIIII IVICIIIa | 175,000 |

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

(2) These options irrevocably expired as of April 5, 2019 as the relevant milestone was not met as described above. Amendment of the 2017 Performance-Based Option Grants

In February 2017, our board of directors, upon the recommendation of our compensation committee, granted performance-based options, or the 2017 performance-based options, to all of our executive and non-executive employees, including Mr. Bailey, Dr. Needle and Ms. Rubin, to incentivize them to achieve three performance milestones relating to our clinical trials for tivozanib. Upon our compensation committee's determination that two of the three milestones were met in 2017, one-third of the total number of shares underlying each of the 2017 performance-based options vested on February 8, 2018 and one-third vested on February 8, 2019, subject to the option grantee's continued service to our company as of the applicable vesting date. The conditions for the remaining performance milestone were the same as the initial "Regulatory Milestone" applicable to the 2018 performance-based options as described above.

In November 2018, our board of directors, upon the recommendation of our compensation committee, approved the same amendments to the definition of "Regulatory Milestone" for the 2017 performance-based options as the 2018 performance-based options such that accordingly, if (i) we file an NDA with the FDA for tivozanib no more than five months after November 5, 2018 and (ii) the FDA accepts the NDA for filing no later than three months after we have filed it, and in no event later than July 30, 2019, the remaining one-third of the total number of shares underlying the 2017 performance-based options would vest on the date the FDA accepts the NDA for tivozanib. However, as we did not file an NDA for tivozanib with the FDA by April 5, 2019, this regulatory milestone was not met and the remaining one-third of the 2017 performance-based options irrevocably expired as of such date.

2019 Equity Compensation Awards

Time-Based Option Grants

In February 2019, 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, contingent on the approval of the 2019 Equity Incentive Plan by our stockholders. As we did not have enough shares under the Second Amended and Restated 2010 Incentive Stock Plan to make these stock option grants, which we refer to as the Contingent Option Awards, and we believe it is appropriate to continue to provide equity as part of an executive's compensation and to grant such awards to executives on the same cycle as in past years, we granted these awards contingent on the approval of the 2019 Equity Incentive Plan. The Contingent Option Awards to such named executive officers were granted with a term of 10 years and an exercise price of \$0.62 per share, which was the closing price of our common stock on the date of grant. The Contingent Option Awards vest in equal monthly installments over four years, subject to the officer's continued employment with our company; provided, that the Contingent Option Awards will automatically terminate and be forfeited if our stockholders do not approve the 2019 Equity Incentive Plan within 12 months of the grant date of the options, and further provided that the options will not be exercisable, and no common stock will be issuable thereunder, before the approval of the 2019 Equity Incentive Plan by our stockholders. 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 2019 peer group companies and the 2018 Radford Global Life Sciences Survey and recommended awards that approximated the 50th percentile of executive equity incentive compensation at those companies.

> **Total Number** of Shares of Common Stock Underlying Time-Based Contingent Option Awards Granted in 2019 (1) Michael Bailey 1,200,000 Matthew Dallas 450,750 Michael Needle 200,000 Nikhil Mehta 450,000 Karuna Rubin 450,650

Name

(1) The Contingent Option Awards will automatically terminate and be forfeited if our stockholders do not approve the 2019 Equity Incentive Plan within 12 months after the grant date. Each Contingent Option Award will not be exercisable and no common stock will be issued thereunder before the approval of the 2019 Equity Incentive Plan by our stockholders.

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. In addition, we have provided housing and commuting allowances to certain of our named executive officers in connection with relocation. 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 our 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 our 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 or her 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. 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.

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 in any taxable year to a company's chief executive officer, chief financial officer, and other officers whose compensation is required to be reported to the company's stockholders pursuant to the Exchange Act by reason of being among its three highest compensated officers. For taxable years beginning on or before December 31, 2017, certain compensation, including compensation paid to our chief financial officer and qualified performance-based compensation, was not subject to the deduction limitations. Pursuant to the Tax Cuts and Jobs Act, signed into law on December 22, 2017, or Tax Act, subject to certain transition rules, for taxable years beginning after December 31, 2017, the deduction limitations under Section 162(m) are expanded to apply to compensation exception to the deduction limitations under Section 162(m) is no longer available. As a result, for taxable years beginning after December 31, 2017, all compensation in excess of \$1 million paid to the specified executives will not be deductible, unless grandfathered under transition guidance. The compensation committee has and will continue to review on a periodic basis the effect of Section 162(m) and may use its judgment to authorize compensation payments that may be in excess of the limit when it believes such payments are appropriate, after taking into consideration changing business conditions and the performance of our employees.

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, 2018, 2017 and 2016

The following table sets forth information for the years ended December 31, 2018, 2017 and 2016 regarding compensation awarded to, earned by or paid to our named executive officers.

Non-Equity

| | | Option | Incentive Plan | All Other | |
|---|--|---|--|--|----------------------------------|
| Name and Principal Position Michael Bailey, Chief Executive Officer | Year Salary (\$) 2018 \$527,621 2017 \$479,655 2016 \$444,125 | Awards (\$) ⁽¹⁾ \$ 2,340,394 (2 \$ 451,076 \$ 329,774 | Compensation (3 4) \$ 174,115 \$ 369,334 \$ 188,753 | \$ 68,593 \$1,36 | (\$) 0,562 88,658 1,085 |
| Matthew Dallas, Chief Financial Officer ⁽⁵⁾ | 2018 \$352,000 2017 \$155,017 | \$ 879,330 (4 \$ 773,750 | (4) \$ 97,152 \$ 103,564 | | 5,760 2,744 |
| Michael Needle, Chief Medical Officer | 2018 \$436,578 2017 \$421,814 2016 \$407,550 | \$ 549,455 (4 \$ 123,827 \$ 131,910 | (4) \$ 106,525 \$ 222,718 \$ 141,827 | \$ 10,112 \$1,10 \$ 45,112 \$813, \$ 70,112 \$751, | |
| Nikhil Mehta Sr. Vice President, Regulatory and Quality Assurance ⁽⁶⁾ | 2018 \$419,999 2017 \$36,873 | \$ 747,200 (4 \$ 1,088,500 | (4) \$ 114,240 \$ 25,518 | | 93,483 91,694 |
| Karuna Rubin Senior Vice President and General Counsel ⁽⁷⁾ | 2018 \$300,217 | \$639,131 (4 | (4) \$ 62,145 | \$ 650 \$1,00 | 2,143 |

- (1) The amounts reported in the "Option Awards" column represents the grant date fair value of the stock options granted during 2018, 2017 and 2016 and, as applicable, incremental fair value associated with the amendment of the 2017 performance-based options and 2018 performance-based options as further detailed in footnote (4) below, 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 1, 2018 and November 8, 2018, the respective dates of grant for option awards made in 2018, were \$3.08 and \$2.00 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 14, 2019 for a discussion of assumptions made by our 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.
- (2) Our compensation committee determined to pay Mr. Bailey, Mr. Dallas, Dr. Needle, Dr. Mehta and Ms. Rubin annual cash incentive awards equal to 60%, 69%, 61%, 68% and 69%, respectively, of such executive officer's target award for performance in 2018. Our compensation committee determined to pay Mr. Bailey, Mr. Dallas, Dr. Needle and Dr. Mehta annual cash incentive awards equal to 140%, 138%, 132% and 132%, respectively, of such

executive officer's target award for performance in 2017. Our compensation committee determined to pay Mr. Bailey and Dr. Needle annual cash incentive awards equal to 85% and 87%, respectively, of such executive officer's target award for performance in 2016.

- (3) 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, and (iii) housing and commuting allowances for Mr. Bailey, in the amount of \$60,000 in each of 2016, 2017 and 2018 and for Dr. Needle, in the amounts of \$60,000 in 2016 and \$35,000 in 2017.
- (4) Amounts include \$156,594, \$115,000, \$58,100, \$201,250 and \$27,667 for each of Mr. Bailey, Mr. Dallas, Dr. Needle, Dr. Mehta and Ms. Rubin, respectively, in incremental fair value associated with the amendment of the 2017 performance-based options and the 2018 performance-based options, each as described in "—Amendment of the 2017 Performance-Based Option Grants" and "—2018 Performance-Based Option Grants" above.
- (5) 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 award for his service during 2017.
- (6) 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 award for his service during 2017.
- (7) In February 2018, Ms. Rubin was promoted to senior vice president and general counsel.

Grants of Plan-Based Awards for the Year Ended December 31, 2018

The following table sets forth information for the year ended December 31, 2018 regarding grants of plan-based awards made during 2018 to our named executive officers.

-

.

| | | | | | Exercise | | |
|----------------|-----------------------------------|-----------------------|-----------------------------------|----------------|-------------------------------|-------------------------------------|-----|
| | | Estimated | Estimated | All Other | or Base | | |
| | | Future Payouts | Listimated | Option Awards: | or Duse | Grant Date | |
| | | Luder Ner | Future Payouts | Number of | Price of | Esin Value | |
| | | Under Non- | Under Equity | Number of | Stock | Fair Value | |
| | | Equity Incentive | | Securities | and | of Stock | |
| | | Plan Awards | Incentive Awards | Underlying | Option | and Option | |
| | Grant | Target | Target | Options | Awards | Awards | |
| | D | - (() (1) | (11) | - | (41) | $(\Phi)(2)$ | |
| Name | Date | (\$) ⁽¹⁾ | (#) | $(#)^{(2)}$ | (\$/sh) | (\$) ⁽³⁾ | |
| Michael Bailey | 2/1/2018 11/8/2018 | \$ 290,192 | 94,334 | 1,000,000 | \$ 3.08 \$ 0.60 | \$2,183,800 \$156,594 | (5) |
| Matthew Dallas | 2/1/2018 2/1/2018 11/8/2018 | \$ 140,800 | 100,000 ⁽⁴⁾ 100,000 | 250,000 | \$ 3.08 \$ 3.08 \$ 3.08 | \$545,950 \$218,380 \$115,000 | (6) |
| Michael Needle | 2/1/2018 11/8/2018 | \$ 174,631 | 35,000 | 225,000 | \$ 3.08 \$ 0.60 | \$491,355 \$58,100 | (5) |
| Nikhil Mehta | 2/1/2018 2/1/2018 11/8/2018 | \$ 168,000 | 175,000 ⁽⁴⁾ 175,000 | 75,000 | \$ 3.08 \$ 3.08 \$ 3.08 | \$163,785 \$382,165 \$201,250 | (6) |
| Karuna Rubin | 2/1/2018 11/8/2018 | \$ 90,065 | 16,667 | 280,000 | \$ 3.08 \$ 0.60 | \$611,464 \$27,667 | (5) |

(1)Represents the target payout levels under the annual cash incentive program. Target payouts for Mr. Bailey, Mr. Dallas, Dr. Needle, Dr. Mehta and Ms. Rubin represented 55%, 40%, 40%, 40% and 30% of base salary in 2018, respectively. The actual payout with respect to each named executive officer is shown above in the Summary Compensation Table for the Years Ended December 31, 2018, 2017, and 2016 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 2018 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, 2018" table below. Some of these awards are subject to acceleration upon termination of employment as further described in the "—Employment Agreements and Severance Arrangements" section 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 1, 2018 and November 8, 2018 were \$3.08 and \$2.00 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, 2018.
- (4) On February 1, 2018, Mr. Dallas and Dr. Mehta were each granted an option to purchase 100,000 shares and 175,000 shares, respectively, of common stock, subject to the achievement of a single performance milestone relating to our company's regulatory filings. These options irrevocably expired as of April 5, 2019 as the relevant milestone was not met as described in the "2018 Performance-Based Option Grants" section above.

(5) Represents incremental fair value associated with the November 2018 amendment of the 2017 performance-based options, as described in "—Amendment of the 2017 Performance-Based Option Grants" above.

(6) Represents incremental fair value associated with the November 2018 amendment of the 2018 performance-based options, as described in "—2018 Performance-Based Option Grants" above.

Outstanding Equity Awards at December 31, 2018

The following table sets forth information regarding outstanding equity awards held as of December 31, 2018 by our named executive officers.

| Option Awards ⁽ | 1) | | | | | |
|----------------------------------|--|--|-------------------|---|--|---|
| | | | Equity | | | |
| | | | Incentive | | | |
| | | | Plan | | | |
| | Number of | Number of | Awards: | | | |
| | Securities | Securities | Number of | | | |
| | Underlying | Underlying | Securities | | | |
| | Unexercised | Unexercised | Underlying | | | |
| | Options | Options | Unexercised | Option | | Option |
| | Exercisable | Unexercisable | Unearned | Exercise | | Expiration |
| | | | | | | |
| Name | (#) | (#) | Options | Price (\$) | | Date |
| Name Michael Bailey | (#) 208,333 | (#) 791,667 | Options | Price (\$) \$ 3.08 | (2) | Date 2/1/2028 |
| | 208,333 94,333 | 791,667 94,333 | Options 94,334 | \$ 3.08 \$ 0.60 | (3) | 2/1/2028 2/8/2027 |
| | 208,333 | 791,667 94,333 306,042 | • | \$ 3.08 | (3) (4) | 2/1/2028 |
| | 208,333 94,333 | 791,667 94,333 306,042 124,584 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 | (3)(4)(5) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 |
| | 208,333 94,333 258,958 335,416 881,250 | 791,667 94,333 306,042 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 | (3) (4) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 |
| | 208,333 94,333 258,958 335,416 881,250 167,500 | 791,667 94,333 306,042 124,584 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 | (3)(4)(5) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 |
| | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 | 791,667 94,333 306,042 124,584 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 | (3)(4)(5) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 |
| | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 | 791,667 94,333 306,042 124,584 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 | (3)(4)(5) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 |
| | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 | 791,667 94,333 306,042 124,584 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 | (3)(4)(5) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 |
| | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 | 791,667 94,333 306,042 124,584 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 | (3)(4)(5) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 |
| | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 5,000 | 791,667 94,333 306,042 124,584 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 \$ 14.16 | (3)(4)(5) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 2/15/2021 |
| Michael Bailey | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 | 791,667 94,333 306,042 124,584 | 94,334 | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 \$ 14.16 \$ 14.26 | (3)(4)(5)(6) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 2/15/2021 10/5/2020 |
| | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 5,000 180,000 | 791,667 94,333 306,042 124,584 18,750 | • | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 \$ 14.16 \$ 14.26 \$ 3.08 | (3) (4) (5) (6) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 2/15/2021 10/5/2020 2/1/2028 |
| Michael Bailey | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 5,000 180,000 | 791,667 94,333 306,042 124,584 18,750 - | 94,334 | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 \$ 14.16 \$ 14.26 \$ 3.08 \$ 3.08 | (3) (4) (5) (6) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 2/15/2021 10/5/2020 2/1/2028 2/1/2028 |
| Michael Bailey Matthew Dallas | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 5,000 180,000 | 791,667 94,333 306,042 124,584 18,750 197,917 312,500 | 94,334 | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 \$ 14.16 \$ 14.26 \$ 3.08 \$ 3.08 \$ 2.22 | (3) (4) (5) (6) (7) (2) (8) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 2/15/2021 10/5/2020 2/1/2028 2/1/2028 7/3/2027 |
| Michael Bailey | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 5,000 180,000 | 791,667 94,333 306,042 124,584 18,750 197,917 312,500 178,125 | 94,334 | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 \$ 14.16 \$ 14.26 \$ 3.08 \$ 3.08 \$ 2.22 \$ 3.08 | (3) (4) (5) (6) (7) (2) (8) (2) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 2/15/2021 10/5/2020 2/1/2028 2/1/2028 7/3/2027 2/1/2028 |
| Michael Bailey Matthew Dallas | 208,333 94,333 258,958 335,416 881,250 167,500 75,000 120,000 32,500 31,000 5,000 180,000 | 791,667 94,333 306,042 124,584 18,750 197,917 312,500 | 94,334 | \$ 3.08 \$ 0.60 \$ 0.60 \$ 1.08 \$ 0.84 \$ 1.57 \$ 1.77 \$ 2.51 \$ 7.72 \$ 13.18 \$ 14.16 \$ 14.26 \$ 3.08 \$ 3.08 \$ 2.22 | (3) (4) (5) (6) (7) (2) (8) | 2/1/2028 2/8/2027 2/8/2027 1/7/2026 1/6/2025 6/19/2024 1/29/2024 6/26/2023 1/24/2023 1/31/2022 2/15/2021 10/5/2020 2/1/2028 2/1/2028 7/3/2027 |

| | 134,166 | 49,834 | | \$ 1.08 | (5) (9 |) 1/7/2026 |
|--------------|---------|---------|---------|---------|--------|------------|
| | 489,583 | 10,417 | | \$ 1.07 | (10)(1 | 1)2/3/2025 |
| Nikhil Mehta | | | 175,000 | \$ 3.08 | (7) | 2/1/2028 |
| | 15,625 | 59,375 | | \$ 3.08 | (2) | 2/1/2028 |
| | 135,416 | 364,584 | | \$ 3.09 | (12) | 11/20/2027 |
| Karuna Rubin | 58,333 | 221,667 | | \$ 3.08 | (2) | 2/1/2028 |
| | 16,666 | 16,667 | 16,667 | \$ 0.60 | (3) | 2/8/2027 |
| | 45,833 | 54,167 | | \$ 0.60 | (4) | 2/8/2027 |
| | 64,583 | 35,417 | | \$ 0.92 | (13) | 5/26/2016 |
| | 21,875 | 8,125 | | \$ 1.08 | (5) | 1/7/2026 |
| | 29,895 | 5,105 | | \$ 1.59 | (14) | 7/7/2025 |

(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 section below.

- (2) These options vest in equal monthly installments through February 1, 2022.
- (3) These options are subject to the achievement of three performance milestones relating to our company's clinical trials and regulatory filings. On June 21, 2017, the compensation committee determined that the first two performance milestones were met, and thus each of Mr. Bailey, Dr. Needle and Ms. Rubin acquired the option to purchase two thirds of this total grant on that date. These shares vested 50% on February 8, 2018 and 50% on February 8, 2019, subject to each recipient's continued service to our company. The remaining one-third of the total number of shares subject to the option irrevocably expired as of April 5, 2019 as the relevant milestone was not met as described above in the "—Amendment to 2017 Performance-Based Option Grants" section above.
- (4) These options vest in equal monthly installments through February 8, 2021.
- (5) These options vest in equal monthly installments through January 1, 2020.
- (6) These options vest in equal monthly installments through January 1, 2019.
- (7) These options were subject to the achievement of a single performance milestone relating to our company's regulatory filings. These options irrevocably expired as of April 5, 2019 as the relevant milestone was not met as described in the "—Amendment to 2018 Performance-Based Option Grants" section above.
- (8) 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.
- (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.
- (13) This option vests as to 25% of the shares underlying the award on May 26, 2017 and in thirty-six equal monthly installments thereafter as to the remaining shares underlying the award through May 26, 2020.
- (14) This option vests as to 25% of the shares underlying the award on July 7, 2016 and in thirty-six equal monthly installments thereafter as to the remaining shares underlying the award through July 7, 2019.

Option Exercises

Our named executive officers did not exercise any stock options during the year ended December 31, 2018.

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 2018 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 2018 for each of our 16 employees (excluding the CEO) as of December 31, 2018. Base annual salaries and target annual cash incentive bonuses have been annualized for full-time employees who joined our company during 2018.

As disclosed in the Summary Compensation Table appearing above, our CEO's annual total compensation for 2018 was \$3,110,562, which includes \$2,340,394 related to the grant date fair value of equity awards during 2018. The annual total compensation of our median employee (other than the CEO) for 2018 was \$248,144. 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 13 to 1. The annual total compensation for 2018 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, or 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 determined at the discretion of the board. 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. 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.

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.

Karuna Rubin. In June 2015, we entered into an offer letter with Ms. Rubin in connection with her commencement of employment. The offer letter generally provided for terms relating to her initial base salary, incentive bonus, initial option grant and other benefits.

Severance and Change in Control Agreements with Executive Officers

We have entered into individual severance and change in control agreements with our named executive officers. 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, our named executive officers 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 our company, the individual severance and change in control 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 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 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.

Karuna Rubin. In March 2019, we entered into a severance and change in control agreement with Ms. Rubin, which we refer to as the Rubin severance agreement. The Rubin severance agreement provides that if Ms. Rubin's employment is terminated "without cause," due to a "disability" or "for good reason," as such terms are defined therein, she will be entitled to (i) continue to receive her base salary in effect on the date of her termination until the earlier of (x) 12 months following the date of termination or (y) the date on which she commences an employment or consulting relationship with substantially equivalent compensation; and (ii) continue her health insurance for the lesser of 12 months or until such time as she 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, our named executive officers participate in our key employee change in control severance benefits plan. 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 or her

payment of a sum equal to (1) such individual's pro rata target bonus plus (11) an amount equal to one times his o 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 or her 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.

Potential Payments and Benefits Upon Termination and a Change in Control

Our named executive officers 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, 2018. 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 compensation earned by each of our named executive officers, see our "Summary Compensation Table for the Years Ended December 31, 2018, 2017 and 2016" above.

| | | | | Termination | |
|-----------------------------|------------------------|-----------------|-----|---------------|-----|
| | | | | without Cause | • |
| | | Termination | | or For Good | |
| | | Without | | Reason | |
| | | Cause, Due to | | Within 18 | |
| | | a Disability or | | Months of a | |
| | | For Good | | Change in | |
| Name and Principal Position | • • | Reason (\$) | | Control (\$) | |
| Michael Bailey | Base Salary | \$ 527,621 | | \$ 791,431 | (2) |
| | Cash Incentive Award | \$ 290,191 | (3) | \$ 725,478 | (4) |
| | Healthcare Benefits | \$ 32,724 | (5) | \$ 49,086 | (6) |
| | Market Value of Awards | . , | | . , | (7) |
| | Vesting on Termination | \$ — | | \$ 479,409 | |
| | Total | \$ 850,536 | | \$ 2,045,404 | |
| Matthew Dallas | Base Salary | \$ 352,000 | (1) | \$ 352,000 | (2) |
| | Cash Incentive Award | \$ — | | \$ 281,600 | (4) |
| | Healthcare Benefits | \$ 2,448 | (5) | \$ 2,448 | (6) |
| | Market Value of Awards | | | | (8) |
| | Vesting on Termination | \$ — | | \$ — | |
| | Total | \$ 354,448 | | \$ 636,048 | |
| Michael Needle | Base Salary | \$ 436,578 | | \$ 436,578 | (2) |
| | Cash Incentive Award | \$ 174,631 | | \$ 349,262 | (4) |
| | Healthcare Benefits | \$ 35,940 | (5) | \$ 35,940 | (6) |
| | Market Value of Awards | | | | (7) |
| | Vesting on Termination | \$ — | | \$ 180,185 | |
| | | | | | |

| Total | \$ 647,149 | \$ 1,001,965 | |
|------------------------|---|--|---|
| Base Salary | \$ 419,999 | ⁽¹⁾ \$ 419,999 | (2) |
| Cash Incentive Award | \$ — | \$ 335,999 | (4) |
| Healthcare Benefits | \$ 23,100 | (5) \$ 23,100 | (6) |
| Market Value of Awards | | | (8) |
| Vesting on Termination | \$ — | \$ — | |
| Total | \$ 443,099 | \$ 779,098 | |
| Base Salary | \$ 300,217 | (1) \$ 300,217 | (2) |
| Cash Incentive Award | \$ — | \$ 180,130 | (4) |
| Healthcare Benefits | \$ 2,448 | (5) \$ 2,448 | (6) |
| Market Value of Awards | | | (7) |
| Vesting on Termination | \$ — | \$ 99,194 | |
| Total | \$ 302,665 | \$ 581,989 | |
| | Base Salary Cash Incentive Award Healthcare Benefits Market Value of Awards Vesting on Termination Total Base Salary Cash Incentive Award Healthcare Benefits Market Value of Awards | Base Salary\$ 419,999Cash Incentive Award\$Healthcare Benefits\$ 23,100Market Value of Awards\$Vesting on Termination\$Total\$ 443,099Base Salary\$ 300,217Cash Incentive Award\$Healthcare Benefits\$ 2,448Market Value of Awards\$Vesting on Termination\$Subscription\$Subscription\$Yesting on Termination\$Vesting on Termination\$ | Base Salary \$ 419,999 (1) \$ 419,999 Cash Incentive Award \$ \$ 335,999 Healthcare Benefits \$ 23,100 (5) \$ 23,100 Market Value of Awards \$ \$ Vesting on Termination \$ \$ Total \$ 443,099 \$ 779,098 Base Salary \$ 300,217 (1) \$ 300,217 Cash Incentive Award \$ \$ 180,130 Healthcare Benefits \$ 2,448 (5) \$ 2,448 Market Value of Awards \$ \$ 99,194 |

(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, 2018 and is valued at the premiums in effect on December 31, 2018.
- (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 31, 2018.
- (8) The then unvested options held by Mr. Dallas and Dr. Mehta as of December 31, 2018 had an exercise price greater than the \$1.60 closing price of our common stock on December 31, 2018.

Equity Compensation Plan Information

The following table sets forth information concerning our equity compensation plans as of December 31, 2018.

Plan Category

| Number of | Weighted- | Number of |
|-------------------|-------------------|------------------|
| securities to be | average | securities |
| issued upon | exercise | remaining |
| exercise of | price of | available for |
| outstanding | outstanding | future issuance |
| options, warrants | options, warrants | under equity |
| and rights | and rights | compensation |
| | | plans (excluding |

securities

Edgar Filing: AVEO PHARMACEUTICALS INC - Form DEF 14A reflected in column (a))

| | | | ••••••••••••••••••••••••••••••••••••••• |
|--|-----------|---------|---|
| | (a) | (b) | (c) |
| Equity compensation plans approved by security holders | 9,583,349 | \$ 2.28 | 1,105,666 |
| 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

Gregory Mayes

Compensation Committee Interlocks and Insider Participation

In the beginning of 2018, our compensation committee was comprised of Anthony Evnin, Kenneth Bate and Robert Young until John Johnson was appointed to our compensation committee in connection with his election to the board of directors in February 2018, replacing Dr. Young and joining Mr. Bate and Dr. Evnin. In connection with his election to the board of directors in February 2019, Gregory Mayes was appointed to our compensation committee, replacing Mr. Johnson 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, 2018.

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. In addition, Mr. Mayes was elected as a director by our board in February 2019, and as such, did not receive any compensation for the year ended December 31, 2018. In connection with his election in February 2019, Mr. Mayes received a nonqualified stock option to purchase 100,000 shares of our common stock at an exercise price of \$0.61 per share, which was equal to the closing price of our common stock on The Nasdaq Capital Market on the effective date of Mr. Mayes's election

The following table sets forth information regarding the compensation earned by our non-employee directors for the year ended December 31, 2018.

| | Fees | | | |
|------|-----------|---------------------|--------------|------------|
| | Earned or | Option | All Other | |
| | Paid In | Awards | Compensation | |
| Name | Cash (\$) | (\$) ⁽¹⁾ | (\$) | Total (\$) |

| Kenneth Bate ⁽³⁾⁽⁴⁾ | \$62,375 | \$62,548 | \$ — \$124,923 |
|---------------------------------|----------|-----------|-------------------|
| Anthony Evnin ⁽³⁾⁽⁴⁾ | \$39,750 | \$62,548 | \$ — \$102,298 |
| Robert Young ⁽³⁾⁽⁴⁾ | \$32,917 | \$62,548 | \$ — \$95,465 |
| John Johnson ⁽²⁾⁽⁴⁾ | \$44,958 | \$214,070 | \$ — \$259,028 |

- (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, 2018. This column reflects the aggregate grant date fair value as calculated in accordance with ASC 718.
- (2) Options were granted at fair market value on February 1, 2018 at an exercise price of \$3.08 per share in connection with Mr. Johnson's appointment to the board of directors on February 1, 2018 and vest over three years in equal monthly installments. These options have a grant date fair market value of \$2.1407 per share. Mr. Johnson resigned from the board of directors, effective February 27, 2019. These options ceased to vest upon Mr. Johnson's resignation, and Mr. Johnson has a period of up to three months from the date of resignation to exercise any option granted as compensation for his service on the board of directors, to the extent vested on the date of resignation. 45

- (3) Options were granted at fair market value on June 18, 2018 at an exercise price of \$2.27 per share in connection with each director's re-election at the annual stockholders meeting held on June 18, 2018 and vest over one year in twelve equal monthly installments. These options have a grant date fair market value of \$1.5637 per share.
- (4) The following table reflects the aggregate number of option awards outstanding for our non-employee directors as of December 31, 2018.

Option

| Name | Awards |
|---------------|---------|
| Kenneth Bate | 299,533 |
| Anthony Evnin | 299,533 |
| Robert Young | 289,783 |
| John Johnson | 100,000 |

For the fiscal year ending December 31, 2018, 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 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 equal monthly installments commencing on the first day of the month following the date of grant and vest in twelve equal monthly installments commencing on the first day of the month following the date of grant and vest in twelve equal monthly installments commencing on the first day of the month following 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;

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. 46

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 board of directors has determined, in accordance with the stockholders' recommendation at our 2017 annual meeting of stockholders, to hold such advisory votes to approve the compensation of our named executive officers every year.

Our executive compensation program is designed to attract, motivate, and retain our executive officers, who are critical to our success. Under this program, our named executive officers are rewarded for the achievement of our short-term and longer-term financial and strategic goals and for driving corporate financial performance and stability. The program contains elements of cash and equity-based compensation and is 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 program and the decisions made by our compensation committee and our board of directors with respect to the year ended December 31, 2018.

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 cash incentive 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 a vote "FOR" the approval of

the compensation of our named executive officers.

PROPOSAL 3—APPROVAL OF 2019 EQUITY INCENTIVE PLAN

Why We Are Requesting Stockholder Approval of the 2019 Equity Incentive Plan

We are asking stockholders to approve the AVEO Pharmaceuticals, Inc. 2019 Equity Incentive Plan, which we refer to as the 2019 Equity Incentive Plan. Our board of directors believes that our success depends, in large part, on our ability to maintain a competitive position by attracting, retaining and motivating key employees with experience and ability. We believe that our stock-based compensation programs are central to this objective. On April 14, 2019, upon the recommendation of our compensation committee, and subject to stockholder approval, the board of directors adopted the 2019 Equity Incentive Plan. The 2019 Equity Incentive Plan is intended to replace our Second Amended and Restated 2010 Stock Incentive Plan, which we refer to as the Prior Plan, which is the Company's only omnibus equity incentive plan. If the stockholders approve the 2019 Equity Incentive Plan at the annual meeting, then we will not grant any new awards under the Prior Plan after the annual meeting, however, awards outstanding under the Prior Plan will remain in effect pursuant to their terms and the terms of the Prior Plan.

If stockholders approve the 2019 Equity Incentive Plan, subject to adjustment in the event of stock splits and other similar events, awards may be made under the 2019 Equity Incentive Plan for up to the sum of (i) 10,000,000 shares of common stock and (ii) such additional number of shares of common stock (up to 10,689,015 shares) as is equal to (x) the number of shares of common stock reserved for issuance under the Prior Plan that remain available for grant under the Prior Plan immediately prior to the date the 2019 Equity Incentive Plan is approved by the Company's stockholders and (y) the number of shares of common stock subject to awards outstanding under the Prior Plan, which awards expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by the Company pursuant to a contractual repurchase right. Each share of the Company's common stock subject to awards granted as options and stock appreciation rights cause one share of the Company's common stock per share under the award to be removed from the available share pool, while each share of the Company's common stock subject to awards granted as restricted stock, restricted stock units, or other stock-based awards where the per share purchase price for the award is less than 100% of the fair market value of the Company's common stock on the date of grant of the award will cause 1.5 shares of the Company's common stock per share under the award to be removed from the available share pool. In addition, to the extent a share that is subject to an award granted under the Prior Plan that counted as 1.5 shares against the Prior Plan's share reserve is made available for the award of future grants under the 2019 Equity Incentive Plan, the share reserve of the 2019 Equity Incentive Plan will be credited with 1.5 shares. Otherwise each share of common stock subject to an award under the Prior Plan that becomes available for grant under the 2019 Equity Incentive Plan will increase the 2019 Equity Incentive Plan's share reserve by one share.

All of our employees, officers, and directors, as well as our consultants and advisors, are eligible to receive awards under the 2019 Equity Incentive Plan. However, incentive stock options may only be granted to our employees, employees of our present or future parent or subsidiary corporations, and employees of any other entities the employees of which are eligible to receive incentive stock options under the Code. As of April 15, 2019, approximately 23 persons were eligible to receive awards under the 2019 Equity Incentive Plan, including our five named executive officers and four non-employee directors.

As of April 15, 2019, options to purchase 10,165,704 shares of common stock were outstanding under the Prior Plan with a weighted-average remaining term of 7.27 years and a weighted-average exercise price of \$2.17 per share, and an additional 523,311 shares of common stock were reserved for future awards under the Prior Plan. In addition, on February 6, 2019, our compensation committee made the annual grant of incentive stock options to our management team, including our named executive officers, subject to stockholder approval of the adoption of the 2019 Equity Incentive Plan. These grants, which we refer to as the Contingent Option Awards, provide for options to purchase an aggregate of 3,303,600 shares. Upon stockholder approval of the 2019 Equity Incentive Plan, the shares of common stock subject to the Contingent Option Awards will be issued from the 10,000,000 share pool under the 2019 Equity

Incentive Plan and are not reserved for issuance under the Prior Plan. We expect that the proposed share pool under the 2019 Equity Incentive Plan, including the shares of common stock subject to the Contingent Option Awards, will allow us to continue to grant equity awards at our historic rates for approximately one to two years.

The shares available for grant under the 2019 Equity Incentive Plan would facilitate our ability to continue to grant equity incentives which is vital to our ability to fully engage and attract and retain the highly skilled individuals required to support our anticipated growth in the extremely competitive labor markets in which we compete. Our employees are some of our most valuable assets, and such awards are crucial to our ability to motivate individuals in our service to achieve our goals. We strongly believe that the approval of the 2019 Equity Incentive Plan is instrumental to our continued success.

The Contingent Option Awards granted on February 6, 2019 are as follows:

| | Total Number |
|----------------------------|-----------------|
| | of Shares of |
| | Common Stock |
| | Subject to |
| | Contingent |
| | Option |
| Name | Awards |
| Michael Bailey | 1,200,000 |
| Matthew Dallas | 450,750 |
| Michael Needle | 200,000 |
| Nikhil Mehta | 450,000 |
| Karuna Rubin | 450,650 |
| Other Management Employees | 552,200 |

The Contingent Option Awards were granted as part of our annual compensation program and are intended to create a further incentive for our employees to increase stockholder value over time through stock price growth, thereby aligning their interests with those of our stockholders. As we did not have enough shares under the Prior Plan to make these awards in our annual grant cycle, and we believe it is appropriate to continue to provide equity as part of an employee's compensation and to grant such awards to employees on the same cycle as in past years, we granted these awards contingent on the approval of the 2019 Equity Incentive Plan by our stockholders. The Contingent Option Awards to such employees were granted with a term of 10 years and an exercise price of \$0.62 per share, which was the closing price of our common stock on the date of grant. The Contingent Option Awards vest in equal monthly installments over four years, subject to the employee's continued employment with the Company; provided, that the Contingent Option Awards will automatically terminate and be forfeited if our stockholders do not approve the 2019 Equity Incentive Plan within 12 months of the grant date of the options, and further provided that the options will not be exercisable, and no common stock will be issuable thereunder, before the approval of the 2019 Equity Incentive Plan by our stockholders.

We believe that our stock-based compensation programs have been integral to our success in the past and will be important to our ability to succeed in the future. If the 2019 Equity Incentive Plan is not approved, the Contingent Option Awards will be rescinded making it more difficult for us to retain our employees. In addition, we may not be able to continue our equity compensation program as we only have 523,311 shares of common stock available for

future awards under the Prior Plan. Furthermore, we will not be able to make long-term equity incentive awards under a stockholder-approved equity incentive plan after the expiration of the Prior Plan on December 31, 2022. Therefore, we consider approval of the 2019 Equity Incentive Plan vital to our future success. Accordingly, our board of directors believes adoption of the 2019 Equity Incentive Plan is in the best interests of the Company and its stockholders and recommends a vote "FOR" the approval of the 2019 Equity Incentive Plan.

Highlights of the 2019 Equity Incentive Plan

Eligibility. The 2019 Equity Incentive Plan permits awards to all of our employees, officers and directors, as well as our consultants and advisors.

No liberal share recycling. The 2019 Equity Incentive Plan prohibits the re-granting of (i) shares withheld or delivered to satisfy the exercise price of an award or to satisfy tax withholding obligations, (ii) shares that were subject to a stock appreciation right, or SAR, and were not issued upon the net settlement or net exercise of such award, or (iii) shares repurchased on the open market using proceeds from the exercise of an award. 49

Fungible Share Pool. "Full-Value Awards," as such term is defined in the 2019 Equity Incentive Plan, count against the share limits under the 2019 Equity Incentive Plan as 1.5 shares for each share of common stock subject to the award. No Repricing of Awards. The 2019 Equity Incentive Plan prohibits the direct or indirect repricing of stock options or SARs without stockholder approval.

No Discounted Options or SARs. All options and SARs must have an exercise or measurement price that is at least equal to the fair market value of the underlying common stock on the date of grant.

One-Year Minimum Vesting Period for Options Granted to New Hires. No time-vested stock options granted to newly hired employees may vest earlier than the first anniversary of the earlier of the grant date or hire date for the employee.

No Reload Options or SARs. No options or SARs granted under the 2019 Equity Incentive Plan may contain a provision entitling the award holder to the automatic grant of additional options or SARs in connection with any exercise of the original option or SAR.

No Dividend Equivalents on Options or SARs. No options or SARs granted under the 2019 Equity Incentive Plan may provide for the payment or accrual of dividend equivalents.

Dividends & Dividend Equivalents on Restricted Stock, Restricted Stock Units and Other-Stock Based Awards Not Paid Until Award Vests. Any dividends or dividend equivalents paid with respect to restricted stock, restricted stock units or other stock-based awards will be subject to the same restrictions on transfer and forfeitability as the award with respect to which it is paid.

Limit on Awards to Non-Employee Directors. The maximum amount of cash and equity compensation (calculated based on grant date fair value for financial reporting purposes) granted to any non-employee director in any calendar year may not exceed \$350,000. Exceptions to this limitation may only be made by our compensation committee in extraordinary circumstances provided that the non-employee director receiving the additional compensation does not participate in the decision to award such compensation.

"Double Trigger" Vesting Following a Change in Control. Awards granted under the 2019 Equity Incentive Plan will not automatically vest solely as a result of a change in control.

Material Amendments Require Stockholder Approval. Stockholder approval is required prior to an amendment to the 2019 Equity Incentive Plan that would (i) materially increase the number of shares authorized, (ii) expand the types of awards that may be granted, or (iii) materially expand the class of participants eligible to participate.

Administered by an Independent Committee. The 2019 Equity Incentive Plan is administered by our compensation committee, which is made up entirely of independent directors.

Information Regarding Overhang and Dilution

In developing our share request for the 2019 Equity Incentive Plan and analyzing the impact of utilizing equity as a means of compensation on our stockholders, we considered both our "overhang" and our "burn rate".

Overhang is a measure of potential dilution which we define as the sum of (i) the total number of shares underlying all equity awards outstanding and (ii) the total number of shares available for future award grants, divided by the sum of (a) the total number of shares underlying all equity awards outstanding, (b) the total number of shares available for future awards and (c) the number of shares outstanding. As of April 15, 2019, there were 10,165,704 shares underlying all option awards outstanding and 523,311 shares available for future awards, and the basic weighted average common shares outstanding year to date for the period ended April 15, 2019 was 134,927,516. Accordingly, our overhang at April 15, 2019 was 7.34%. If the 10,000,000 additional shares, which include the 3,303,600 shares of common stock subject to the Contingent Option Awards, proposed to be authorized for grant under the 2019 Equity Incentive Plan are included in the calculation, our overhang on April 15, 2019 would have been 13.29%.

Burn rate provides a measure of the potential dilutive impact of our equity award program which we calculate by dividing the number of shares subject to equity awards granted during the year by the basic weighted average number of shares outstanding. Set forth below is a table that reflects our burn rate for the 2018, 2017 and 2016 calendar years as well as an average over those years.

Basic Weighted Average

| Calendar Year | Awards Grantee | d Number of Common Shares Outstanding | Gross Burn Rate (1) |
|-------------------|----------------|---------------------------------------|---------------------|
| 2018 | 2,680,115 | 120,592,000 | 2.2% |
| 2017 | 3,455,135 | 105,930,000 | 3.3% |
| 2016 | 1,781,134 | 69,268,000 | 2.6% |
| Three-Year Averag | e 2,638,795 | 98,597,000 | 2.7% |

(1)We define "gross burn rate" as the number of equity awards granted in the year divided by the basic weighted average number of common shares outstanding.

Description of the 2019 Equity Incentive Plan

The following is a brief summary of the 2019 Equity Incentive Plan, a copy of which is attached as Appendix A to this proxy statement. References to our board of directors in this summary shall include our compensation committee or any similar committee appointed by our board of directors to administer the 2019 Equity Incentive Plan.

Types of Awards; Shares Available for Awards; Share Counting Rules

The 2019 Equity Incentive Plan provides for the grant of incentive stock options intended to qualify under Section 422 of the Internal Revenue Code of 1986, as amended, or the Code, nonstatutory stock options, SARs, restricted stock, restricted stock units, other stock-based awards and cash awards as described below, which we collectively refer to as awards.

Subject to adjustment in the event of stock splits, stock dividends or similar events, awards may be made under the 2019 Equity Incentive Plan (any or all of which awards may be in the form of incentive stock options) for up to the sum of 10,000,000 shares of our common stock plus such additional number of shares of our common stock (up to 10,689,015 shares) as is equal to (x) the number of shares of the Company's common stock reserved for issuance under the Prior Plan that remain available for grant under the Prior Plan immediately prior to the date that the 2019 Equity Incentive Plan is approved by the Company's stockholders and (y) the number of shares of common stock subject to awards outstanding under the Prior Plan, which awards expire, terminate or are otherwise surrendered, cancelled or forfeited or repurchased by the Company pursuant to a contractual repurchase right (subject, in the case of incentive stock options, to any limitations under the Prior Plan that counted as 1.5 shares against the Prior Plan's share reserve is made available for the award of future grants under the 2019 Equity Incentive Plan, the share reserve of the 2019 Equity Incentive Plan will be credited with 1.5 shares. Otherwise, each share of common stock subject to an award under the Prior grant under the 2019 Equity Incentive Plan will increase the 2019 Equity Incentive Plan's share reserve by one share.

The 2019 Equity Incentive Plan uses a "fungible share" concept under which each share of the Company's common stock subject to awards granted as options and SARs cause one share of the Company's common stock per share under the award to be removed from the available share pool, while each share of the Company's common stock subject to "Full-Value Awards," which include any award granted as restricted stock, restricted stock units, or other stock-based awards where the per share price or per unit purchase price for the award is less than 100% of the fair market value per share of the Company's common stock on the date of grant of the award, will cause 1.5 shares of the Company's

common stock per share under the award to be removed from the available share pool. Shares of the Company's common stock covered by awards under the 2019 Equity Incentive Plan that are returned to the 2019 Equity Incentive Plan as described in the following paragraph and become available for issuance pursuant to a new award will be credited back to the pool at the same rates described above.

The 2019 Equity Incentive Plan provides that the maximum amount of cash and equity compensation (calculated based on grant date fair value for financial reporting purposes) granted to any individual non-employee director in any calendar year may not exceed \$350,000. Exceptions to this limitation may only be made by our compensation committee in extraordinary circumstances provided that any non-employee director receiving additional compensation does not participate in the decision to award such compensation.

For purposes of counting the number of shares available for the grant of awards under the 2019 Equity Incentive Plan, all shares of common stock covered by SARs will be counted against the number of shares available for the grant of awards. However, SARs that may be settled only in cash will not be so counted. Similarly, to the extent that a restricted stock unit award may be settled only in cash, no shares will be counted against the shares available for the grant of awards under the 2019 Equity Incentive Plan. In addition, if we grant an SAR in tandem with an option for the same number of shares of our common stock and provide that only one such award may be exercised, which we refer to as a tandem SAR, only the shares covered by the option, and not the shares covered by the tandem SAR, will be so counted, and the expiration of one in connection with the other's exercise will not restore shares to the 2019 Equity Incentive Plan.

Shares covered by awards under the 2019 Equity Incentive Plan that expire or are terminated, surrendered, or cancelled without having been exercised or are forfeited in whole or in part (including as the result of shares subject to such award being repurchased by us at the original issuance price pursuant to a contractual repurchase right) or that result in any shares not being issued (including as a result of an SAR that was settleable either in cash or in stock actually being settled in cash) will again be available for the grant of awards under the 2019 Equity Incentive Plan (subject, in the case of incentive stock options, to any limitations under the Code). In the case of the exercise of an SAR, the number of shares counted against the shares available for the grant of awards under the 2019 Equity Incentive Plan will be the full number of shares subject to the SAR multiplied by the percentage of the SAR actually exercised, regardless of the number of shares actually used to settle the SAR upon exercise, and the shares covered by a tandem SAR will not again become available for grant upon the expiration or termination of the tandem SAR.

Shares of common stock that are delivered (by actual delivery, attestation, or net exercise) to us by a participant to purchase shares of common stock upon exercise of an award or to satisfy tax withholding obligations (including shares retained from the award creating the tax obligation) will not be added back to the number of shares available for the future grant of awards under the 2019 Equity Incentive Plan. Shares purchased by us on the open market using proceeds from the exercise of an award will not increase the number of shares available for future grant of awards.

In connection with a merger or consolidation of an entity with us or our acquisition of property or stock of an entity, our board of directors may grant awards under the 2019 Equity Incentive Plan in substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof on such terms as our board of directors determines appropriate in the circumstances, notwithstanding any limitation on awards contained in the 2019 Equity Incentive Plan. Any such substitute awards shall not count against the overall share limits of the 2019 Equity Incentive Plan, except as required by reason of Section 422 and related provisions of the Code.

Descriptions of Awards

Options. Optionees receive the right to purchase a specified number of shares of common stock at a specified exercise price and subject to the other terms and conditions that are specified in connection with the option grant. An option that is not intended to be an "incentive stock option" is a "nonstatutory stock option". Options may not be granted at an exercise price that is less than 100% of the fair market value of our common stock on the date of grant. If our board of directors approves the grant of an option with an exercise price to be determined on a future date, the exercise price may not be less than 100% of the fair market value of our common stock on that future date. Under present law, incentive stock options may not be granted at an exercise price less than 110% of the fair market value in the case of

stock options granted to optionees holding more than 10% of the total combined voting power of all classes of our stock or any of our subsidiaries. Under the terms of the 2019 Equity Incentive Plan, options may not be granted for a term in excess of ten years (and, under present law, five years in the case of incentive stock options granted to optionees holding greater than 10% of the total combined voting power of all classes of our stock or any of our subsidiaries). The 2019 Equity Incentive Plan permits participants to pay the exercise price of options using one or more of the following manners of payment: (i) payment by cash, by check, (ii) except as may otherwise be

provided in the applicable option agreement or approved by our board of directors, in connection with a "cashless exercise" through a broker, (iii) to the extent provided in the applicable option agreement or approved by our board of directors, and subject to certain conditions, by delivery of shares of common stock to us owned by the participant valued at their fair market value, (iv) to the extent provided in an applicable nonstatutory stock option agreement or approved by our board of directors, by delivery of a notice of "net exercise" as a result of which we will retain a number of shares of common stock otherwise issuable pursuant to the stock option equal to the aggregate exercise price for the portion of the option being exercised divided by the fair market value of our common stock on the date of exercise, (v) to the extent permitted by applicable law and provided for in the applicable option agreement or approved by our board of directors, by any other lawful means (but not by a promissory note of the participant), or (vi) by any combination of these forms of payment. No option granted under the 2019 Equity Incentive Plan may contain a provision entitling the participant to the automatic grant of additional options in connection with any exercise of the original option. No options granted under the 2019 Equity Incentive Plan may provide for the payment or accrual of dividend equivalents. No option that vests solely based on the passage of time that is granted to an employee in connection with his or her commencement of employment will vest earlier than the first anniversary of the grant date or the date of commencement of employment, whichever is earlier. Notwithstanding the foregoing, the board of directors may, either at the time of grant or at any time thereafter, allow the option vesting to accelerate in the event of the death or disability of the employee, the termination of employment of the employee in specified circumstances or in connection with certain transactions.

Stock Appreciation Rights. An SAR is an award entitling the holder, upon exercise, to receive a number of shares of our common stock, or cash (or a combination of shares of our common stock and cash) determined by reference to appreciation, from and after the date of grant, in the fair market value of a share of our common stock over the measurement price. The 2019 Equity Incentive Plan provides that the measurement price of an SAR may not be less than the fair market value of our common stock on the date the SAR is granted (provided, however, that if our board of directors approves the grant of an SAR effective as of a future date, the measurement price shall not be less than 100% of the fair market value on such future date) and that SARs may not be granted with a term in excess of 10 years. No SARs granted under the 2019 Equity Incentive Plan may contain a provision entitling the participant to the automatic grant of additional SARs in connection with any exercise of the original SAR. No SARs granted under the 2019 Equity Incentive Plan may contain a provision entitling the participant to the automatic grant of additional SARs in connection with any exercise of the original SAR. No SARs granted under the 2019 Equity Incentive Plan may contain a provision entitling the participant to the automatic grant of additional SARs in connection with any exercise of the original SAR.

Limitation on Repricing of Options or SARs. With respect to options and SARs, unless such action is approved by stockholders or otherwise permitted under the terms of the 2019 Equity Incentive Plan in connection with certain changes in capitalization and reorganization events, we may not (1) amend any outstanding option or SAR granted under the 2019 Equity Incentive Plan to provide an exercise price or measurement price per share that is lower than the then-current exercise price or measurement price per share of such outstanding option or SAR, (2) cancel any outstanding option or SAR (whether or not granted under the 2019 Equity Incentive Plan) and grant in substitution therefor new awards under the 2019 Equity Incentive Plan (other than certain substitute awards issued in connection with an acquisition by us, as described above) covering the same or a different number of shares of our common stock and having an exercise price or measurement price per share lower than the then-current exercise price or measurement price per share lower than the then-current any outstanding option or SAR with an exercise price or measurement price per share above the then-current fair market value of our common stock, or (4) take any other action under the 2019 Equity Incentive Plan that constitutes a "repricing" within the meaning of the rules of the Nasdaq.

Restricted Stock Awards. Restricted stock awards entitle recipients to acquire shares of our common stock, subject to our right to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) in the event that the conditions specified in the applicable award are not satisfied prior to the end of the applicable restriction period established for such award. Any dividends (whether paid in cash, stock or property) declared and paid by us with respect to shares of restricted stock will be paid to the

participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares.

Restricted Stock Unit Awards. Restricted stock units, or RSUs, entitle the recipient to receive shares of our common stock, or cash equal to the fair market value of such shares, to be delivered at the time such award vests pursuant to the terms and conditions established by our board of directors. Our board of directors may provide that settlement of RSUs will be deferred, on a mandatory basis or at the election of the participant in a manner that complies with

Section 409A of the Code. A participant has no voting rights with respect to any RSU. Our board of directors may provide that a grant of RSUs may provide the participant with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of our common stock. Any such dividend equivalents may be settled in cash and/or shares of our common stock and will be subject to the same restrictions on transfer and forfeitability as the RSUs with respect to which such dividend equivalents are awarded.

Other Stock-Based Awards. Under the 2019 Equity Incentive Plan, our board of directors may grant other awards of shares of our common stock, and other awards that are valued in whole or in part by reference to, or are otherwise based on, shares of our common stock or other property, having such terms and conditions as our board of directors may determine. We refer to these types of awards as other stock-based awards. Other stock-based awards may be available as a form of payment in settlement of other awards granted under the 2019 Equity Incentive Plan or as payment in lieu of compensation to which a participant is otherwise entitled. Other stock-based awards may be paid in shares of our common stock or in cash, as our board of directors may determine. The award agreement of other stock-based awards may provide the holder of such award with the right to receive dividend equivalents. Dividend equivalents will be credited to an account for the participant, may be settled in cash and/or shares of our common stock as provided in the award agreement, and will be subject to the same restrictions on transfer and forfeitability as the other stock-based award with respect to which they are paid.

Cash Awards. Under the 2019 Equity Incentive Plan, the board of directors has the right to grant cash-based awards including awards subject to performance conditions.

Performance Conditions. Our board of directors may specify that the degree of granting, vesting and/or payout of any award is subject to the achievement of one or more of the following performance measures established by the board of directors, which may be based on the relative or absolute attainment of specified levels of one or any combination of the following measures (and which may be determined pursuant to generally accepted accounting principles, referred to as GAAP, or on a non-GAAP basis, as determined by the board of directors): (i) the entry into an arrangement or agreement with a third party for the development, commercialization, marketing or distribution of products, services or technologies, or for conducting a research program to discover and develop a product, service or technology, and/or the achievement of milestones under such arrangement or agreement, including events that trigger an obligation or payment right; (ii) achievement of domestic and international regulatory milestones, including the submission of filings required to advance products, services and technologies in clinical development and the achievement of approvals by regulatory authorities relating to the commercialization of products, services and technologies; (iii) the achievement of discovery, preclinical and clinical stage scientific objectives, discoveries or inventions for products, services and technologies under research and development; (iv) the entry into or completion of a phase of clinical development for any product, service or technology, such as the entry into or completion of phase 1, 2 and/or 3 clinical trials; (v) the consummation of debt or equity financing transactions, or acquisitions of business, technologies and assets; (vi) new product or service releases; (vii) the achievement of qualitative or quantitative performance measures set forth in operating plans approved by our board of directors from time to time; (viii) specified levels of product sales, net income, earnings before or after discontinued operations, interest, taxes, depreciation and/or amortization, operating profit before or after discontinued operations and/or taxes, sales, sales growth, earnings growth, cash flow or cash position, gross margins, stock price, market share, return on sales, assets, equity or investment; (ix) improvement of financial ratings; (x) achievement of balance sheet or income statement objectives; (xi) total stockholder return; (xii) other comparable measures of financial and operational performance; and/ or (xiii) any other measure selected by our board of directors. Such goals may reflect, as applicable, absolute entity or business unit performance or a relative comparison to the performance of a peer group of entities or other external measure of the selected performance criteria and may be absolute in their terms or measured against or in relationship to other companies comparably, similarly or otherwise situated. The board of directors may specify that such performance measures will be adjusted to exclude any one or more of (i) extraordinary items, (ii) gains or losses on the dispositions of discontinued operations, (iii) the cumulative effects of changes in accounting principles, (iv) the writedown of any

asset, (v) charges for restructuring and rationalization programs; and/or (vi) any other factors that our board of directors may determine. Such performance measures: (i) may vary by participant and may be different for different awards; (ii) may be particular to a participant or the department, branch, line of business, subsidiary or other unit in which the participant works and (iii) may cover such period as may be specified by the board of directors. The board of directors shall have the authority to make equitable adjustments to the performance goals in recognition of unusual or non-recurring events affecting the Company or the financial statements of the Company, in response to changes in applicable laws or regulations or to

account for items of gain, loss or expense determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principles. Our board of directors may adjust the cash or number of shares payable pursuant to a performance award, and the board of directors may, at any time, waive the achievement of the applicable performance measures, including in the case of the death or disability of the participant or a change in control of the Company.

Eligibility to Receive Awards

All of our employees, officers, and directors, as well as our consultants and advisors, are eligible to receive awards under the 2019 Equity Incentive Plan. As of April 15, 2019, approximately 23 persons were eligible to receive awards under the 2019 Equity Incentive Plan, including our five named executive officers, four non-employee directors, twelve employees (which excludes our named executive officers referenced as a separate class), and two consultants. However, incentive stock options may only be granted to our employees, employees of our present or future parent or subsidiary corporations, and employees of any other entities the employees of which are eligible to receive incentive stock options under the Code. Presently, we have three subsidiaries, AVEO Pharma Limited, AVEO Securities Corporation, and AVEO Pharma (Ireland) Limited, and these subsidiaries have no employees.

Transferability of Awards

Awards may not be sold, assigned, transferred, pledged or otherwise encumbered by a participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an incentive stock option, pursuant to a qualified domestic relations order. During the life of the participant, awards are exercisable only by the participant. However, except with respect to awards that are subject to Section 409A of the Code, our board of directors may permit or provide in an award for the gratuitous transfer of the award by the participant to or for the benefit of any immediate family member, family trust or other entity established for the benefit of the participant and/or an immediate family member thereof if we would be eligible to use a Form S-8 under the Securities Act of 1933, as amended for the registration of the sale of the common stock subject to such award to the proposed transferee. Further, we are not required to recognize any transfer until such time as the participant and the permitted transferee have, as a condition to the transfer, delivered to us a written instrument in form and substance satisfactory to us confirming that such transferee will be bound by all of the terms and conditions of the award. None of the restrictions described in this paragraph prohibit a transfer from the participant to the Company.

No Rights as a Stockholder; Clawback

No participant shall have any rights as a stockholder with respect to any shares of common stock to be issued with respect to an award granted under the 2019 Equity Incentive Plan until becoming a record holder of such shares, subject to the terms of an award agreement. In accepting an award under the 2019 Equity Incentive Plan, a participant agrees to be bound by any clawback policy that the Company has in effect or may adopt in the future.

Administration

The 2019 Equity Incentive Plan will be administered by our board of directors. Our board of directors has the authority to grant awards and to adopt, amend and repeal the administrative rules, guidelines and practices relating to the 2019 Equity Incentive Plan that it deems advisable and to construe and interpret the provisions of the 2019 Equity Incentive Plan and any award agreements entered into under the 2019 Equity Incentive Plan. Our board of directors may correct any defect, supply any omission or reconcile any inconsistency in the 2019 Equity Incentive Plan or any award. All actions and decisions by our board of directors with respect to the 2019 Equity Incentive Plan and any awards made under the 2019 Equity Incentive Plan will be made in our board of directors' discretion and will be final and binding on all persons having or claiming any interest in the 2019 Equity Incentive Plan or in any award.

Pursuant to the terms of the 2019 Equity Incentive Plan, our board of directors may delegate any or all of its powers under the 2019 Equity Incentive Plan to one or more committees or subcommittees of our board of directors. The board of directors has authorized our compensation committee to administer certain aspects of the 2019 Equity Incentive Plan, including the granting of awards to executive officers. Awards granted to non-employee directors must be granted and administered by a committee of the board of directors, all of the members of which are independent directors as defined by Section 5605(a)(2) of the Nasdaq rules.

Subject to any applicable limitations contained in the 2019 Equity Incentive Plan, the board of directors, our compensation committee, or any other committee or officer to whom the board of directors delegates authority, as the case may be, selects the recipients of awards and determines (i) the number of shares of common stock, cash or other consideration covered by awards and the terms and conditions of such awards, including the dates upon which such awards become exercisable or otherwise vest, (ii) the exercise or measurement price of awards, if any, and (iii) the duration of awards.

Each award under the 2019 Equity Incentive Plan may be made alone or in addition or in relation to any other award. The terms of each award need not be identical, and our board of directors need not treat participants uniformly. Our board of directors will determine the effect on an award of the disability, death, termination or other cessation of employment, authorized leave of absence or other change in the employment or other status of a participant, and the extent to which, and the period during which, the participant (or the participant's legal representative, conservator, guardian or designated beneficiary) may exercise rights or receive any benefits under an award. Our board of directors may at any time provide that any award shall become immediately exercisable in whole or in part, free from some or all restrictions or conditions or otherwise realizable in whole or in part, as the case may be.

In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of our common stock, other than an ordinary cash dividend, we are required to make equitable adjustments (or make substituted awards, as applicable), in the manner determined by our board of directors, to (i) the number and class of securities available under the 2019 Equity Incentive Plan, (ii) the share counting rules set forth in the 2019 Equity Incentive Plan, (iii) the number and class of securities and exercise price per share of each outstanding option, (iv) the share- and per-share provisions and the measurement price of each outstanding SAR, (v) the number of shares subject to and the repurchase price per share subject to each outstanding award of restricted stock, and (vi) the share and per-share-related provisions and the purchase price, if any, of each outstanding RSU award and each outstanding other stock-based award.

We will indemnify and hold harmless each director, officer, employee or agent to whom any duty or power relating to the administration or interpretation of the 2019 Equity Incentive Plan has been or will be delegated against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with our board of directors' approval) arising out of any act or omission to act concerning the 2019 Equity Incentive Plan unless arising out of such person's own fraud or bad faith.

Amendment of awards. Except as otherwise provided under the 2019 Equity Incentive Plan with respect to repricing outstanding stock options or SARs, our board of directors may amend, modify or terminate any outstanding award, including but not limited to, substituting therefor another award of the same or a different type, changing the date of exercise or realization, and converting an incentive stock option to a nonstatutory stock option, provided that the participant's consent to any such action will be required unless our board of directors determines that the action, taking into account any related action, does not materially and adversely affect the participant's rights under the 2019 Equity Incentive Plan or the change is otherwise permitted under the terms of the 2019 Equity Incentive Plan in connection with a change in capitalization or reorganization event.

Reorganization Events & Change in Control Events

The 2019 Equity Incentive Plan contains provisions addressing the consequences of any reorganization event or change in control event. A reorganization event is defined under the 2019 Equity Incentive Plan as (a) any merger or consolidation of us with or into another entity as a result of which all of our common stock is converted into or exchanged for the right to receive cash, securities or other property, or is canceled, (b) any transfer or disposition of all of our common stock for cash, securities or other property pursuant to a share exchange or other transaction or (c) our liquidation or dissolution. A change in control event is generally defined under the 2019 Equity Incentive Plan as (a) the acquisition of beneficial ownership of our capital stock if, after such acquisition, the acquirer owns 50% or more of the then-outstanding shares of our common stock or 50% or more of the combined voting power of our then-outstanding securities entitled to vote generally in the election of our directors, subject to certain limitations, (b) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange or a sale or other disposition of all or substantially all of our assets, subject to certain limitations, (c) such time as our continuing directors (as defined under the 2019 Equity Incentive Plan) cease to constitute a majority of our board of directors (or, if applicable, the board of directors of our successor corporation) or (d) our liquidation or dissolution.

Provisions Applicable to Awards Other than Restricted Stock. Under the 2019 Equity Incentive Plan, upon a reorganization event or the execution of an agreement with respect to a reorganization event (regardless of whether such event also constitutes a change in control event, our board of directors will provide that all outstanding awards other than restricted stock will be assumed, or equivalent awards will be substituted, by the acquiring or succeeding corporation. If such reorganization event also constitutes a change in control event, then except to the extent otherwise provided in the award agreement or another agreement with the participant, such assumed or substituted award will become vested if, on or prior to the first anniversary of the consummation of the reorganization event, the participant's employment with us or the acquiring or succeeding company is terminated without cause (as defined in the 2019 Equity Incentive Plan) by us or the acquiring or succeeding corporation. Notwithstanding the foregoing, if the acquiring or succeeding corporation does not agree to assume or substitute the awards other than restricted stock, or in the event of our liquidation or dissolution, our board of directors will provide that all awards other than restricted stock will become vested as of a specified time prior to the reorganization event and will terminate on the reorganization event, unless, in the case of options, the award in exercised prior to the consummation of the reorganization event; provided that if under the terms of the reorganization event, the holders of common stock will receive a cash payment for each share of common stock surrendered in the reorganization event, then our board of directors may instead provide that all outstanding awards other than restricted stock will terminated upon the consummation of the reorganization event and each participant will receive, in exchange therefor, a cash payment equal to the amount by which the cash consideration per share of common stock exceeds the exercise price (if any), multiplied by the number of shares subject to the award.

Upon a change in control event that does not constitute a reorganization event, except to the extent otherwise provided in the award agreement or another agreement with the participant, each award other than restricted stock will become immediately vested if, on or prior to the first anniversary of the change in control event, the participant's employment with us or the acquiring or succeeding corporation is terminated without cause by us or the acquiring or succeeding corporation.

Provisions Applicable to Restricted Stock. Upon the occurrence of a reorganization event that is not a change in control event, our repurchase and other rights with respect to outstanding restricted stock will inure to the benefit of our successor and will, unless our board of directors determines otherwise, apply to the cash, securities or other property which our common stock was converted into or exchanged for pursuant to such reorganization event in the same manner and to the same extent as they applied to such restricted stock. Upon the occurrence of a change in control event, except to the extent specifically provided to the contrary in the award agreement or any other agreement with the participant, all restrictions and conditions on the restricted stock then outstanding will automatically be

deemed terminated or satisfied if, on or prior to the first anniversary of the change in control event, the participant's employment with us or the acquiring or succeeding corporation is terminated without cause by us or the acquiring or succeeding corporation.

Provisions for Foreign Participants

Our board of directors may establish one or more sub-plans under the 2019 Equity Incentive Plan to satisfy applicable securities, tax or other laws of various jurisdictions. Our board of directors will establish such sub-plans by adopting supplements to the 2019 Equity Incentive Plan containing any limitations on our board of directors' discretion under the 2019 Equity Incentive Plan and any additional terms and conditions not otherwise inconsistent with the 2019 Equity Incentive Plan as our board of directors deems necessary or desirable. All supplements adopted by our board of directors will be deemed to be part of the 2019 Equity Incentive Plan, but each supplement will only apply to participants within the affected jurisdiction.

Amendment or Termination

If we receive stockholder approval of the 2019 Equity Incentive Plan, no award may be granted under the 2019 Equity Incentive Plan after June 11, 2029, but awards previously granted may extend beyond that date. Our board of directors may amend, suspend or terminate the 2019 Equity Incentive Plan or any portion of the 2019 Equity Incentive Plan at any time, except that no amendment that would amend the prohibitions on repricings without stockholder approval may be amended without stockholder approval and no amendment that would require stockholder approval under the rules of the national securities exchange on which the Company then maintains its primary listing may be made effective unless and until such amendment has been approved by our stockholders. If the national securities exchange on which the Company then maintains its primary listing does not have rules regarding when stockholder approval of amendments to equity compensation plans is required (or if our common stock is not then listed on any national securities exchange), no amendment of the 2019 Equity Incentive Plan materially increasing the number of shares authorized under the plan, expanding the types of awards that may be granted under the plan or materially expanding the class of participants eligible to participate in the plan will be effective unless and until our stockholders approve such amendment. If at any time the approval of our stockholders is required as to any other modification or amendment under Section 422 of the Code or any successor provision with respect to incentive stock options, our board of directors may not effect such modification or amendment without such approval. Unless otherwise specified in the amendment, any amendment to the 2019 Equity Incentive Plan adopted in accordance with the procedures described above will apply to, and be binding on the holders of, all awards outstanding under the 2019 Equity Incentive Plan at the time the amendment is adopted, provided that our board of directors determines that such amendment, taking into account any related action, does not materially and adversely affect the rights of participants under the 2019 Equity Incentive Plan. No award will be made that is conditioned on stockholder approval of any amendment to the 2019 Equity Incentive Plan unless the award provides that (i) it will terminate or be forfeited if stockholder approval of such amendment is not obtained within no more than 12 months from the date the award was granted and (ii) it may not be exercised or settled (or otherwise result in the issuance of shares of our common stock) prior to the receipt of such stockholder approval.

If stockholders do not approve the adoption of the 2019 Equity Incentive Plan, the 2019 Equity Incentive Plan will not go into effect, and we will not grant any awards under the 2019 Equity Incentive Plan. In this event, our board of directors will consider whether to adopt alternative arrangements based on its assessment of the needs of our company.

Plan Benefits

As of April 15, 2019, approximately 23 persons were eligible to receive awards under the 2019 Equity Incentive Plan, including our five named executive officers, four non-employee directors, twelve employees (which excludes our named executive officers referenced as a separate class), and two consultants. On February 6, 2019, our compensation committee granted the following Contingent Option Awards to our management team, including our named executive officers, subject to stockholder approval of the adoption of the 2019 Equity Incentive Plan:

| | Total Number |
|---|--------------------------|
| | of Shares of |
| | Common Stock |
| | Subject to Contingent |
| | Option |
| Name and Position | Awards |
| Michael Bailey, Chief Executive Officer | 1,200,000 |
| Matthew Dallas, Chief Financial Officer | 450,750 |
| Michael Needle, Chief Medical Officer | 200,000 |
| Nikhil Mehta, Senior Vice President, Regulatory and Quality Assurance | 450,000 |
| Karuna Rubin, Senior Vice President and General Counsel | 450,650 |
| Named Executive Officer Group | 2,751,400 |
| Non-Executive Director Group | _ |
| Other Management Employee Group | 552,200 |
| Total | 3,303,600 |
| Total | 5,505,000 |

Other than the Contingent Option Awards, the granting of awards under the 2019 Equity Incentive Plan is discretionary, and we cannot now determine the number or type of awards to be granted in the future to any particular person or group.

On April 15, 2019 the last reported sale price of our common stock on the Nasdaq was \$1.00.

Federal Income Tax Consequences

The following is a summary of the United States federal income tax consequences that generally will arise with respect to awards granted under the 2019 Equity Incentive Plan. This summary is based on the federal tax laws in effect as of the date of this proxy statement. In addition, this summary assumes that all awards are exempt from, or comply with, the rules under Section 409A of the Code regarding nonqualified deferred compensation. Changes to these laws could alter the tax consequences described below.

Incentive Stock Options. A participant will not have income upon the grant of an incentive stock option. Also, except as described below, a participant will not have income upon exercise of an incentive stock option if the participant has been employed by the Company or its corporate parent or 50% or majority-owned corporate subsidiary at all times beginning with the option grant date and ending three months before the date the participant exercises the option. If the participant has not been so employed during that time, then the participant will be taxed as described below under "Nonstatutory Stock Options." The exercise of an incentive stock option may subject the participant to the alternative minimum tax.

A participant will have income upon the sale of the stock acquired under an incentive stock option at a profit (if sales proceeds exceed the exercise price). The type of income will depend on when the participant sells the stock. If a participant sells the stock more than two years after the option was granted and more than one year after the option was exercised, then all of the profit will be long-term capital gain. If a participant sells the stock prior to satisfying these waiting periods, then the participant will have engaged in a disqualifying disposition and a portion of the profit will be ordinary income and a portion may be capital gain. This capital gain will be long-term if the participant has held the stock for more than one year and otherwise will be short-term. If a participant sells the stock at a loss (sales proceeds are less than the exercise price), then the loss will be a capital loss. This capital loss will be long-term if the participant if the participant held the stock for more than one year and otherwise will be a capital loss. This capital loss will be long-term if the participant if the participant held the stock for more than one year and otherwise will be a capital loss. This capital loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Nonstatutory Stock Options. A participant will not have income upon the grant of a nonstatutory stock option. A participant will have compensation income upon the exercise of a nonstatutory stock option equal to the value of the stock on the day the participant exercised the option less the exercise price. Upon sale of the stock, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the day the option was exercised. This capital gain or loss will be long-term if the participant has held the stock for more than one year and otherwise will be short-term.

Stock Appreciation Rights. A participant will not have income upon the grant of a stock appreciation right. A participant generally will recognize compensation income upon the exercise of an SAR equal to the amount of the cash and the fair market value of any stock received. Upon the sale of the stock, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the day the SAR was exercised. This capital gain or loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Restricted Stock Awards. A participant will not have income upon the grant of restricted stock unless an election under Section 83(b) of the Code is made within 30 days of the date of grant. If a timely 83(b) election is made, then a participant will have compensation income equal to the value of the stock less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the date of grant. If the participant does not make an 83(b) election, then when the stock vests the participant will have compensation income equal to the value of the stock on the vesting date less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the sales proceeds less the value of the stock on the vesting date. Any capital gain or loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Restricted Stock Units. A participant will not have income upon the grant of a restricted stock unit. A participant is not permitted to make a Section 83(b) election with respect to a restricted stock unit award. When the restricted stock unit vests, the participant will have income on the vesting date in an amount equal to the fair market value of the stock on the vesting date less the purchase price, if any. When the stock is sold, the participant will have capital gain or loss equal to the sales proceeds less the value of the stock on the vesting date. Any capital gain or loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Other Stock-Based Awards. The tax consequences associated with any other stock-based award granted under the 2019 Equity Incentive Plan will vary depending on the specific terms of such award. Among the relevant factors are whether or not the award has a readily ascertainable fair market value, whether or not the award is subject to forfeiture provisions or restrictions on transfer, the nature of the property to be received by the participant under the award, and the participant's holding period and tax basis for the award or underlying common stock.

Tax Consequences to the Company. There will be no tax consequences to the Company except that the Company will be entitled to a deduction when a participant has compensation income, subject to the limitations of Section 162(m) of the Code.

Our board of directors recommends a vote "FOR" the approval of

the 2019 Equity Incentive Plan.

PROPOSAL 4—APPROVAL OF AMENDMENT TO RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF OUR COMMON STOCK

On April 19, 2019, our board of directors approved, subject to stockholder approval, an amendment to our Restated Certificate of Incorporation to (i) increase the number of authorized shares of capital stock from 255,000,000 shares to 505,000,000 shares and (ii) increase the number of authorized shares of our common stock from 250,000,000 shares to 500,000,000 shares.

Our Restated Certificate of Incorporation currently authorizes 250,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.001 per share. As of April 15, 2019, out of the 250,000,000 shares of common stock presently authorized, 31,172,962 shares remained available for future issuance and 218,827,038 shares were issued or reserved for issuance, as follows:

●60,739,471 shares of common stock were outstanding;

40,165,704 shares of common stock are issuable upon exercise of outstanding stock options pursuant to the Second Amended and Restated 2010 Stock Incentive Plan;

523,311 shares of common stock are reserved for future issuance under our Second Amended and Restated 2010 Stock Incentive Plan;

298,308 shares of common stock are reserved for future issuance under our 2010 Employee Stock Purchase Plan; **4**3,839,375 shares of common stock are issuable upon exercise of outstanding warrants to purchase common stock; and

3,260,869 shares of common stock are issuable upon exercise of the 30-day overallotment option we granted to H.C. Wainwright & Co., LLC pursuant to the purchase agreement dated April 3, 2019, which option expires on May 3, 2019.

In addition, if Proposal 3 (Approval of the 2019 Equity Incentive Plan) is approved, we will be required to reserve additional shares of common stock for future issuance under the 2019 Equity Incentive Plan (as further described under "Description of the 2019 Equity Incentive Plan – Types of Awards; Shares Available for Awards; Share Counting Rules" on page 51 above).

For a discussion of our reverse stock split proposal, please see Proposal 5 (Approval of Amendment to Restated Certificate of Incorporation to Effect a Reverse Stock Split of Our Common Stock by a Ratio of Not Less Than 1-For-5 and Not More Than 1-For-15, and a Proportionate Reduction in the Number of Authorized Shares of Common Stock, Such Ratio and the Implementation and Timing of the Reverse Stock Split to be Determined in the Discretion of Our Board Of Directors) beginning on page 63 below. To the extent Proposal 5 is approved and the Reverse Stock Split is implemented, the authorized shares of the Company will be proportionately reduced in accordance with the split ratio determined by our Board.

The proposed amendment to our Restated Certificate of Incorporation would not increase or otherwise affect our authorized preferred stock. As of April 15, 2019, there were no shares of our preferred stock outstanding.

Our common stock is all of a single class, with equal voting, distribution, liquidation and other rights. The additional common stock to be authorized by adoption of the amendment would have rights identical to our currently outstanding common stock.

A copy of the amendment to our Restated Certificate of Incorporation is attached as Appendix B to this proxy statement. If our stockholders approve the proposal, subject to the discretion of the board, we will file the amendment to the Restated Certificate of Incorporation with the Secretary of State of the State of Delaware as soon as practicable.

Purpose

Our board of directors believes that it is in the best interests of our company to increase the number of authorized shares of common stock in order to give us greater flexibility in considering and planning for potential business

needs. The increase in the number of authorized but unissued shares of common stock would enable the company, without the expense and delay of seeking stockholder approval, to issue shares from time to time as may be required for proper business purposes.

We anticipate that we may issue additional shares of common stock in the future in connection with one or more of the following:

financing transactions, such as public or private offerings of common stock or convertible securities; partnerships, collaborations and other similar transactions;

- our equity incentive
 - plans;

strategic investments; and

other corporate purposes that have not yet been identified.

At this time, we do not have any plans, commitments, arrangements, understandings or agreements regarding the issuance of common stock following the increase of our authorized shares except for the shares issuable upon the exercise or conversion of outstanding options and warrants and shares of common stock issuable under our sales agreement with SVB Leerink LLC (formerly known as Leerink Partners LLC) dated February 16, 2018, pursuant to which we may offer and sell shares of our common stock from time to time. However, the availability of additional shares of common stock for issuance is, in management's view, prudent and will afford us flexibility in acting upon financing transactions to strengthen our financial position and/or commercial partnership opportunities that may arise.

Possible Effects of the Amendment

If the amendment of the Restated Certificate of Incorporation is approved, the additional authorized shares would be available for issuance at the discretion of our board of directors and without further stockholder approval, except as may be required by law or the rules of The Nasdaq Capital Market on which our common stock is listed. The additional shares of authorized common stock would have the same rights and privileges as the shares of common stock currently issued and outstanding. Holders of our common stock have no preemptive rights.

The issuance of additional shares of common stock may, among other things, have a dilutive effect on earnings per share and on stockholders' equity and voting rights. Furthermore, future sales of substantial amounts of our common stock, or the perception that these sales might occur, could adversely affect the prevailing market price of our common stock or limit our ability to raise additional capital. Stockholders should recognize that, as a result of this proposal, they will own a smaller percentage of shares relative to the total authorized shares of the company than they presently own.

Our board of directors recommends a vote "FOR" the approval of the amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our common stock

PROPOSAL 5—APPROVAL OF AMENDMENT TO RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF OUR COMMON STOCK BY A RATIO OF NOT LESS THAN 1-FOR-5 AND NOT MORE THAN 1-FOR-15, AND A PROPORTIONATE REDUCTION IN THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK, SUCH RATIO AND THE IMPLEMENTATION AND TIMING OF THE REVERSE STOCK SPLIT TO BE DETERMINED IN THE DISCRETION OF OUR BOARD OF DIRECTORS

We are seeking stockholder approval for a proposal to adopt an amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split, or the Reverse Stock Split, of our issued common stock by a ratio of not less than 1-for-5 and not more than 1-for-15, and a proportionate reduction in the number of authorized shares of common stock, such ratio and the implementation and timing of the Reverse Stock Split to be determined in the discretion of our board of directors.

The form of the amendment to our Restated Certificate of Incorporation, as amended, to effect the Reverse Stock Split is set forth on Appendix C. Approval of the proposal would permit (but not require) our board of directors to effect the Reverse Stock Split by a ratio of not less than 1-for-5 and not more than 1-for-15, with the exact ratio to be set within this range as determined by our board of directors in its sole discretion, provided that the board of directors must determine to effect the Reverse Stock Split and such amendment must be filed with the Secretary of State of the State of Delaware no later than December 31, 2019. The exact ratio of the Reverse Stock Split will be determined by the board of directors prior to the effective time of the Reverse Stock Split and will be publicly announced by the Company prior to the effective time of the Reverse Stock Split. We believe that enabling our board of directors to set the ratio of the Reverse Stock Split within the stated range will provide us with the flexibility to implement the Reverse Stock Split in a manner designed to maximize the anticipated benefits for our stockholders. In determining a ratio of the Reverse Stock Split, if any, following the receipt of stockholder approval, our board of directors may consider, among other things, factors such as:

the historical trading prices and trading volume of our common stock;

the number of shares of our common stock outstanding;

the then-prevailing trading price and trading volume of our common stock and the anticipated or actual impact of the Reverse Stock Split on the trading price and trading volume for our common stock;

the anticipated impact of a particular ratio on our ability to reduce administrative and transactional costs; and prevailing general market and economic conditions.

Although our board of directors may effect the Reverse Stock Split any time on or before December 31, 2019, our board of directors may determine to effect the Reverse Stock Split immediately upon receipt of stockholder approval of this Proposal 5, or soon thereafter. In addition, our board of directors reserves the right to elect to abandon the Reverse Stock Split, including any or all proposed ratios for the Reverse Stock Split, if it determines, in its sole discretion, that the Reverse Stock Split is no longer in the best interests of the Company and its stockholders.

Depending on the ratio for the Reverse Stock Split determined by our board of directors, no fewer than every five and no more than every 15 shares of issued common stock will be reclassified into one share of common stock. The Reverse Stock Split would also proportionately reduce the number of authorized shares of common stock of the Company. The Reverse Stock Split will not change the number of authorized shares of preferred stock of the Company, or the par value of the Company's common stock or preferred stock.

Background and Reasons for the Reverse Stock Split; Potential Consequences of the Reverse Stock Split

Our common stock is currently quoted on The Nasdaq Capital Market under the symbol "AVEO". The standards of The Nasdaq Capital Market require us to have, among other things, a \$1.00 per share minimum bid price in order to maintain our listing. On March 18, 2019, we received a deficiency letter from the Listing Qualifications Department of the Nasdaq Stock Market notifying us that, for the last 30 consecutive business days, the bid price for our common stock had closed below the minimum \$1.00 per share requirement for continued inclusion on The Nasdag Capital Market. We were provided with an initial period of 180 calendar days, or until September 16, 2019, to regain compliance with the minimum bid price requirement. If at any time before September 16, 2019, the bid price for our common stock closes at \$1.00 or more for a minimum of 10 consecutive trading days, we may be eligible to regain compliance with the minimum bid price requirement. However, under certain circumstances Nasdaq could require that the bid price exceed \$1.00 for more than ten consecutive trading days before determining that we comply with Nasdaq's continued listing standards. We may not be able to meet the \$1.00 minimum bid price requirement of The Nasdaq Capital Market unless we effect a reverse stock split to increase the per share market price of our common stock. Therefore, our board of directors may determine to effect the Reverse Stock Split to the extent necessary in order to maintain our listing on The Nasdaq Capital Market. Even if we regain compliance with the \$1.00 minimum bid price requirement of The Nasdaq Capital Market, our board of directors may determine to effect the Reverse Stock Split prior to December 31, 2019 in order to avoid a subsequent deficiency in the minimum bid price requirement of The Nasdaq Capital Market or if it determines, in its sole discretion, that effecting the Reverse Stock Split is in the best interests of the Company and its stockholders.

Reducing the number of outstanding shares of our common stock through the Reverse Stock Split is intended, absent other factors, to increase the per share market price of our common stock. However, other factors, such as our financial results, market conditions and the market perception of our business may adversely affect the market price of our common stock. As a result, there can be no assurance that the Reverse Stock Split, if completed, will result in the intended benefits described above, that the market price of our common stock will increase following the Reverse Stock Split or that the market price of our common stock will not decrease in the future. Additionally, we cannot assure you that the market price per share of our common stock after a Reverse Stock Split will increase in proportion to the reduction in the number of shares of our common stock after the Reverse Stock Split. Accordingly, the total market capitalization of our common stock after the Reverse Stock Split may be lower than the total market capitalization before the Reverse Stock Split.

The Reverse Stock Split will also proportionately reduce the number of shares of common stock that our board of directors is authorized to issue under our certificate of incorporation.

Procedure for Implementing the Reverse Stock Split

The Reverse Stock Split would become effective upon the filing of a certificate of amendment to our Restated Certificate of Incorporation, as amended, with the Secretary of State of the State of Delaware. The exact timing of the filing of the certificate of amendment that will effect the Reverse Stock Split will be determined by our board of directors, in its sole discretion, provided that in no event shall the filing of the certificate of amendment effecting the Reverse Stock Split occur after December 31, 2019. Our board of directors may determine to effect the Reverse Stock Split immediately upon receipt of stockholder approval of this Proposal 5, or soon thereafter. In addition, our board of directors reserves the right, notwithstanding stockholder approval of this Proposal 5 and without further action by the stockholders, to elect not to proceed with the Reverse Stock Split if, at any time prior to filing the certificate of amendment to our Restated Certificate of Incorporation to effect the Reverse Stock Split, or, in the event that the amendment is not effective until a later time, such later time, our board of directors, in its sole discretion, determines that it is no longer in the Company's best interests and the best interests of our stockholders to proceed with the Reverse Stock Split. If a certificate of amendment effecting the Reverse Stock Split has not been filed with the

Secretary of State of the State of Delaware on or before December 31, 2019, our board of directors will abandon the Reverse Stock Split.

Effect of the Reverse Stock Split on Holders of Outstanding Common Stock

Depending on the ratio for the Reverse Stock Split determined by our board of directors, a minimum of every five and a maximum of every 15 shares of issued common stock will be combined into one new share of common stock. Based on 160,739,471 shares of common stock issued and outstanding as of April 15, 2019, immediately following the Reverse Stock Split the Company would have approximately 32,147,894 shares of common stock issued and outstanding if the ratio for the Reverse Stock Split is 1-for-5, and 10,715,964 shares of common stock issued and outstanding if the ratio for the Reverse Stock Split is 1-for-15. Any other ratio selected within such range would result in a number of shares of common stock issued and outstanding of between 10,715,964 and 32,147,894 shares.

The actual number of shares issued and outstanding after giving effect to the Reverse Stock Split, if implemented, will depend on the ratio for the Reverse Stock Split that is ultimately determined by our board of directors.

The Reverse Stock Split will affect all holders of our common stock uniformly and will not affect any stockholder's percentage ownership interest in the Company, except that, as described below under "—Fractional Shares," record holders of common stock otherwise entitled to a fractional share as a result of the Reverse Stock Split will receive cash in lieu of such fractional share. In addition, the Reverse Stock Split will not affect any stockholder's proportionate voting power (subject to the treatment of fractional shares).

The Reverse Stock Split may result in some stockholders owning "odd lots" of less than 100 shares of common stock. Odd lot shares may be more difficult to sell, and brokerage commissions and other costs of transactions in odd lots may be higher than the costs of transactions in "round lots" of even multiples of 100 shares.

After the effective time of the Reverse Stock Split, our common stock will have a new Committee on Uniform Securities Identification Procedures (CUSIP) number, which is a number used to identify our equity securities, and stock certificates with the older CUSIP numbers will need to be exchanged for stock certificates with the new CUSIP numbers by following the procedures described below. After the Reverse Stock Split, we will continue to be subject to the periodic reporting and other requirements of the Securities Exchange Act of 1934, as amended.

Authorized Shares of Common Stock

The Reverse Stock Split will also proportionately reduce the number of shares of common stock that our board of directors is authorized to issue under our certificate of incorporation. Except for the shares issuable upon the exercise or conversion of outstanding options and warrants, shares of common stock issuable under our sales agreement with SVB Leerink LLC (formerly known as Leerink Partners LLC) dated February 16, 2018, pursuant to which we may offer and sell shares of our common stock from time to time, and shares of common stock issuable upon the exercise of the 30-day overallotment option we granted to H.C. Wainwright & Co., LLC pursuant to the purchase agreement dated April 3, 2019, we do not currently have any plans, proposals or arrangement to issue any of our authorized but unissued shares of common stock.

Beneficial Holders of Common Stock (i.e. stockholders who hold in street name)

For purposes of implementing the Reverse Stock Split, we intend to treat shares held by stockholders through a bank, broker, custodian or other nominee in the same manner as registered stockholders whose shares are registered in their names. Banks, brokers, custodians or other nominees will be instructed to effect the Reverse Stock Split for their beneficial holders holding our common stock in street name. However, these banks, brokers, custodians or other nominees may have different procedures than registered stockholders for processing the Reverse Stock Split. Stockholders who hold shares of our common stock with a bank, broker, custodian or other nominee and who have any questions in this regard are encouraged to contact their banks, brokers, custodians or other nominees.

Registered "Book-Entry" Holders of Common Stock (i.e. stockholders that are registered on the transfer agent's books and records but do not hold stock certificates)

Certain of our registered holders of common stock may hold some or all of their shares electronically in book-entry form with the transfer agent. These stockholders do not have stock certificates evidencing their ownership of the common stock. They are, however, provided with a periodic statement reflecting the number of shares registered in their accounts.

Stockholders who hold shares electronically in book-entry form with the transfer agent will not need to take action to receive whole shares of post-Reverse Stock Split common stock, because the exchange will be automatic.

Exchange of Stock Certificates

If the Reverse Stock Split is effected, stockholders holding certificated shares (i.e., shares represented by one or more physical stock certificates) will be requested to exchange their old stock certificate(s) ("Old Certificate(s)") for shares held in book-entry form through the Depository Trust Company's Direct Registration System representing the appropriate number of whole shares of our common stock resulting from the Reverse Stock Split. Stockholders of record upon the effective time of the Reverse Stock Split will be furnished the necessary materials and instructions for the surrender and exchange of their Old Certificate(s) at the appropriate time by our transfer agent, Computershare. Stockholders will not have to pay any transfer fee or other fee in connection with such exchange. As soon as practicable after the effective time of the Reverse Stock Split, the transfer agent will send a transmittal letter to each stockholder advising such holder of the procedure for surrendering Old Certificate(s) in exchange for new shares held in book-entry form. Your Old Certificate(s) representing pre-split shares cannot be used for either transfers or deliveries. Accordingly, you must exchange your Old Certificate(s) in order to effect transfers or deliveries of your shares.

YOU SHOULD NOT SEND YOUR OLD CERTIFICATES NOW. YOU SHOULD SEND THEM ONLY AFTER YOU RECEIVE THE LETTER OF TRANSMITTAL FROM THE TRANSFER AGENT.

As soon as practicable after the surrender to the transfer agent of any Old Certificate(s), together with a properly completed and duly executed transmittal letter and any other documents the transfer agent may specify, the transfer agent will have its records adjusted to reflect that the number of whole shares of post-Reverse Stock Split common stock into which the shares represented by such Old Certificate(s) have been reclassified in connection with the Reverse Stock Split are held in book-entry form in the name of such person.

Until surrendered as contemplated herein, a stockholder's Old Certificate(s) shall be deemed at and after the effective time of the Reverse Stock Split to represent the number of whole shares of our common stock resulting from the Reverse Stock Split.

Any stockholder whose Old Certificate(s) have been lost, destroyed or stolen will be entitled to new shares in book-entry form only after complying with the requirements that we and our transfer agent customarily apply in connection with lost, stolen or destroyed certificates.

No service charges, brokerage commissions or transfer taxes shall be payable by any holder of any Old Certificate, except that if any book-entry shares are to be issued in a name other than that in which the Old Certificate(s) are registered, it will be a condition of such issuance that (1) the person requesting such issuance must pay to us any applicable transfer taxes or establish to our satisfaction that such taxes have been paid or are not payable, (2) the transfer complies with all applicable federal and state securities laws, and (3) the surrendered Old Certificate(s) are properly endorsed and otherwise in proper form for transfer.

Any stockholder who wants to continue holding certificated shares may request new certificate(s) from our transfer agent.

Fractional Shares

Fractional shares will not be issued in connection with the Reverse Stock Split. Stockholders of record and stockholders who hold their shares through a bank, broker, custodian or other nominee who would otherwise hold fractional shares of our common stock as a result of the Reverse Stock Split will be entitled to receive cash (without interest and subject to applicable withholding taxes) in lieu of such fractional shares. Each such stockholder will be entitled to receive an amount in cash equal to the fraction of one share to which such stockholder would otherwise be entitled multiplied by the fair value of our common stock at the effective time of the Reverse Stock Split is effected) of the high and low trading prices of our common stock on The Nasdaq Capital Market during regular trading hours for the five trading days immediately preceding the effective time of the Reverse Stock Split.

Stockholders should be aware that, under the escheat laws of the various jurisdictions where stockholders reside, where we are domiciled and where the funds will be deposited, sums due for fractional interests resulting from the Reverse Stock Split that are not timely claimed after the effective time in accordance with applicable law may be required to be paid to the designated agent for each such jurisdiction. Thereafter, stockholders otherwise entitled to receive such funds may have to seek to obtain them directly from the state to which they were paid.

Effect of the Reverse Stock Split on Employee Plans, Options, Restricted Stock Awards and Warrants

Pursuant to the various instruments governing our then outstanding stock option awards and warrants to purchase common stock and any outstanding restricted stock awards, in connection with any Reverse Stock Split, our board of directors will reduce the number of shares of common stock issuable upon the exercise of the stock options and warrants and the number of shares of restricted stock in proportion to the ratio of the Reverse Stock Split and proportionately increase the exercise price of our outstanding stock options and warrants. In connection with such proportionate adjustments, the number of shares of common stock issuable upon exercise or conversion of outstanding stock options, warrants and restricted stock awards will be rounded down to the nearest whole share and the exercise prices will be rounded up to the nearest cent, and no cash payment will be made in respect of such rounding.

Accounting Matters

The amendment to our Restated Certificate of Incorporation, as amended, will not affect the par value of our common stock per share, which will remain \$0.001 par value per share. As a result, as of the effective time of the Reverse Stock Split, the stated capital attributable to common stock and the additional paid-in capital account on our balance sheet will not change due to the Reverse Stock Split. Reported per share net income or loss will be higher because there will be fewer shares of common stock outstanding.

No Appraisal Rights

Under the Delaware General Corporation Law, our stockholders are not entitled to dissenter's rights or appraisal rights with respect to the Reverse Stock Split and we will not independently provide our stockholders with any such rights.

Interest of Certain Persons in Matters to be Acted Upon

No officer or director has any substantial interest, direct or indirect, by security holdings or otherwise, in the Reverse Stock Split that is not shared by all of our other stockholders.

Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following discussion is a summary of the material U.S. federal income tax consequences of the proposed Reverse Stock Split to U.S. Holders of our common stock. This discussion is based on the Internal Revenue Code of 1986, as amended, which we refer to as the Code, U.S. Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, which we refer to as the IRS, in each case in effect as of the date of this proxy statement. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a U.S. Holder. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the proposed Reverse Stock Split.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of our common stock that, for U.S. federal income tax purposes, is or is treated as:

an individual who is a citizen or resident of the United States;

a corporation (or any other entity or arrangement treated as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia;
an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
a trust if (1) its administration is subject to the primary supervision of a court within the United States and all of its substantial decisions are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code), or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

This discussion is limited to U.S. Holders who hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to the particular circumstances of a U.S. Holder, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to U.S. Holders that are subject to special rules, including, without limitation:

Financial institutions; Insurance companies; Real estate investment trusts; Regulated investment companies; Grantor trusts; Tax-exempt organizations; Dealers or traders in securities or currencies; or

U.S. Holders who hold common stock as part of a position in a straddle or as part of a hedging, conversion or integrated transaction for U.S. federal income tax purposes or U.S. holders that have a functional currency other than the U.S. dollar.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is the beneficial owner of our common stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. Accordingly, partnerships (and other entities treated as partnerships for U.S. federal income tax purposes) holding our common stock and the partners in such entities should consult their own tax advisors regarding the U.S. federal income tax consequences of the proposed Reverse Stock Split to them.

In addition, the following discussion does not address the U.S. federal estate and gift tax, alternative minimum tax, or state, local and non-U.S. tax law consequences of the proposed Reverse Stock Split. Furthermore, the following discussion does not address any tax consequences of transactions effectuated before, after or at the same time as the

proposed Reverse Stock Split, whether or not they are in connection with the proposed Reverse Stock Split.

STOCKHOLDERS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PROPOSED REVERSE STOCK SPLIT ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

The proposed Reverse Stock Split is intended to be treated as a "recapitalization" for U.S. federal income tax purposes pursuant to Section 368(a)(1)(E) of the Code. As a result, a U.S. Holder generally should not recognize gain or loss upon the proposed Reverse Stock Split for U.S. federal income tax purposes, except with respect to cash received in lieu of a fractional share of our common stock, as discussed below. A U.S. Holder's aggregate adjusted tax basis in the shares of AVEO common stock received pursuant to the proposed Reverse Stock Split should equal the aggregate adjusted tax basis of the shares of AVEO common stock surrendered (reduced by the amount of such basis that is allocated to any fractional share of our common stock). The U.S. Holder's holding period in the shares of AVEO common stock surrendered. U.S. Holder's holding period in the shares of AVEO common stock acquired on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

A U.S. Holder that, pursuant to the proposed Reverse Stock Split, receives cash in lieu of a fractional share of our common stock should recognize capital gain or loss in an amount equal to the difference, if any, between the amount of cash received and the portion of the U.S. Holder's aggregate adjusted tax basis in the shares of AVEO common stock surrendered that is allocated to such fractional share. Such capital gain or loss will be short term if the pre-Reverse Stock Split shares were held for one year or less at the effective time of the Reverse Stock Split and long term if held for more than one year. No gain or loss will be recognized by us as a result of the proposed Reverse Stock Split.

Payments of cash made in lieu of a fractional share of our common stock may, under certain circumstances, be subject to information reporting and backup withholding. To avoid backup withholding, each holder of our common stock that does not otherwise establish an exemption should furnish its taxpayer identification number and comply with the applicable certification procedures.

Backup withholding is not an additional tax and amounts withheld will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle such holder to a refund, provided the required information is timely furnished to the IRS. Holders of our common stock should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Our board of directors recommends a vote "FOR" the approval of the amendment to our Restated Certificate of Incorporation to effect the Reverse Stock Split described above.

PROPOSAL 6—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, 2019. 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, 2019.

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 2020 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 January 1, 2020, the date that is 120 days prior to the first anniversary of the date of this proxy statement. However, if the date of the 2020 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 2020 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 14, 2020 (90 days prior to the first anniversary of our 2019 annual meeting of stockholders) and not before February 13, 2020 (120 days prior to the first anniversary of our 2019 annual meeting of stockholders). However, if the 2020 annual meeting of stockholders is advanced by more than 20 days, or delayed by more than 60 days, from the first anniversary of the 2019 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 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 2020 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 SUBMIT A 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.

Appendix A

AVEO PHARMACEUTICALS, INC.

2019 EQUITY INCENTIVE PLAN

1.Purpose

The purpose of this 2019 Equity and Incentive Plan (the "Plan") of Aveo Pharmaceuticals, Inc., a Delaware corporation (the "Company"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and cash and equity performance-based incentives that are intended to better align the interests of such persons with those of the Company's stockholders. Except where the context otherwise requires, the term "Company" shall include any of the Company's present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations thereunder (the "Code") and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the "Board").

2. Eligibility

All of the Company's employees, officers and directors, as well as consultants and advisors to the Company (as the terms consultants and advisors is defined and interpreted for purposes of Form S-8 under the Securities Act of 1933, as amended (the "Securities Act"), or any successor form) are eligible to be granted Awards (as defined below) under the Plan. Each person who is granted an Award under the Plan is deemed a "Participant." The Plan provides for the following types of awards, each of which is referred to as an "Award": Options (as defined in Section 5), SARs (as defined in Section 6), Restricted Stock (as defined in Section 7), RSUs (as defined in Section 7), Other Stock-Based Awards (as defined in Section 8) and Cash-Based Awards (as defined in Section 8). Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.

3. Administration and Delegation

(a)Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award. All actions and decisions by the Board with respect to the Plan and any Awards shall be made in the Board's discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award.

(b)Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "Committee"). All references in the Plan to the "Board" shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board's powers or authority under the Plan have been delegated to such Committee or officers.

(c)Delegation to Officers. Subject to any requirements of applicable law (including as applicable Sections 152 and 157(c) of the General Corporation Law of the State of Delaware), the Board may delegate to one or more officers of the Company the power to grant Awards (subject to any limitations under the Plan) to employees or officers of the Company and to exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the terms of Awards to be granted by such officers, the maximum number of shares subject to Awards that the officers may grant, and the time period in which such Awards may be granted; and provided further, that no officer

shall be authorized to grant Awards to any "executive officer" of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) or to any "officer" of the Company (as defined by Rule 16a-1(f) under the Exchange Act).

A-1

(d)Awards to Non-Employee Directors. Awards to non-employee directors will be granted and administered by a Committee, all of the members of which are independent directors as defined by Section 5605(a)(2) of the NASDAQ Marketplace Rules.

4. Stock Available for Awards(a)Number of Shares; Share Counting.

(1)Authorized Number of Shares. Subject to adjustment under Section 10, Awards may be made under the Plan for up to a number of shares of common stock, \$0.001 par value per share, of the Company (the "Common Stock"), as is equal to the sum of:

(A)10,000,000 shares of Common Stock; and

(B)such additional number of shares of Common Stock (up to 10,689,015 shares) as is equal to the sum of (x) the number of shares of Common Stock reserved for issuance under the Company's Second Amended and Restated 2010 Stock Incentive Plan (the "Existing Plan") that remain available for grant under the Existing Plan immediately prior to the date that the Plan is approved by the Company's stockholders (the "Effective Date") and (y) the number of shares of Common Stock subject to awards outstanding under the Existing Plan which awards expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right (subject, however, in the case of Incentive Stock Options to any limitations under the Code). For the avoidance of doubt, (i) to the extent a share that was subject to an award granted under the Existing Plan that counted as one share is returned to the Plan pursuant to this Section 4(a)(1)(B), each applicable share reserve will be credited with one share and (ii) to the extent that a share that was subject to an award granted under the Existing Plan that counted as 1.5 shares is returned to the Plan pursuant to this Section 4(a)(1)(B), each applicable share reserve will be credited with 1.5 shares.

Any or all of which Awards may be in the form of Incentive Stock Options (as defined in Section 5(b)). Shares of Common Stock issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(2)Fungible Share Pool. Subject to adjustment under Section 10, any Award that is not a Full-Value Award (as defined below) shall be counted against the share limits specified in Sections 4(a)(1) as one share for each share of Common Stock subject to such Award and any Award that is a Full-Value Award shall be counted against the share limits specified in Sections 4(a)(1) as 1.5 shares for each one share of Common Stock subject to such Full-Value Award. "Full-Value Award" means any award of Restricted Stock, RSUs or Other Stock-Based Award with a per share price or per unit purchase price lower than 100% of the fair market value per share of Common Stock (valued in the manner determined or approved by the Board) on the date of grant. To the extent a share that was subject to an Award that counted as one share is returned to the Plan pursuant to Section 4(a)(3), each applicable share reserve will be credited with one share. To the extent that a share that was subject to an Award that counts as 1.5 shares is returned to the Plan pursuant to Section 4(a)(3), each applicable share reserve will be credited with 1.5 shares.

(3)Share Counting. For purposes of counting the number of shares available for the grant of Awards under the Plan under this Section 4(a):

(A)all shares of Common Stock covered by SARs shall be counted against the number of shares available for the grant of Awards under the Plan; provided, however, that (i) SARs that may be settled only in cash shall not be so counted and (ii) if the Company grants an SAR in tandem with an Option for the same number of shares of Common Stock and provides that only one such Award may be exercised (a "Tandem SAR"), only the shares covered by the Option, and not the shares covered by the Tandem SAR, shall be so counted, and the expiration of one in connection with the

other's exercise will not restore shares to the Plan;

(B)to the extent that an RSU may be settled only in cash, no shares shall be counted against the shares available for the grant of Awards under the Plan;

A-2

(C)if any Award (i) expires or is terminated, surrendered or cancelled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right) or (ii) results in any Common Stock not being issued (including as a result of an SAR that was settleable either in cash or in stock actually being settled in cash), the unused Common Stock covered by such Award shall again be available for the grant of Awards; provided, however, that (1) in the case of Incentive Stock Options, the foregoing shall be subject to any limitations under the Code, (2) in the case of the exercise of an SAR, the number of shares counted against the shares available under the Plan shall be the full number of shares subject to the SAR multiplied by the percentage of the SAR actually exercised, regardless of the number of shares actually used to settle such SAR upon exercise and (3) the shares covered by a Tandem SAR shall not again become available for grant upon the expiration or termination of such Tandem SAR;

(D)shares of Common Stock delivered (either by actual delivery, attestation, or net exercise) to the Company by a Participant to (i) purchase shares of Common Stock upon the exercise of an Award or (ii) satisfy tax withholding obligations with respect to Awards (including shares retained from the Award creating the tax obligation) shall not be added back to the number of shares available for the future grant of Awards; and

(E)shares of Common Stock repurchased by the Company on the open market using the proceeds from the exercise of an Award shall not increase the number of shares available for future grant of Awards.

(b)Limit on Awards to Non-Employee Directors. The maximum amount of cash and equity compensation (calculated based on grant date fair value for financial reporting purposes) granted in any calendar year to any individual non-employee director shall not exceed \$350,000. The Compensation Committee may make exceptions to this limit for individual non-employee directors in extraordinary circumstances, as the Committee may determine in its discretion, provided that the non-employee director receiving such additional compensation may not participate in the decision to award such compensation.

(c)Substitute Awards. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Awards in substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof. Substitute Awards may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Awards contained in the Plan. Substitute Awards shall not count against the overall share limit set forth in Section 4(a)(1) or any sublimit contained in the Plan, except as may be required by reason of Section 422 and related provisions of the Code.

5. Stock Options.

(a)General. The Board may grant options to purchase Common Stock (each, an "Option") and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as the Board considers necessary or advisable.

(b)Incentive Stock Options. An Option that the Board intends to be an "incentive stock option" as defined in Section 422 of the Code (an "Incentive Stock Option") shall only be granted to employees of Aveo Pharmaceuticals, Inc., any of Aveo Pharmaceuticals, Inc.'s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Code, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code, and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. An Option that is not intended to be an Incentive Stock Option shall be designated a "Nonstatutory Stock Option." The Company shall have no liability to a Participant, or any other person, if an Option (or any part thereof) that is intended to be an Incentive Stock Option or if the Company converts an Incentive Stock Option to a Nonstatutory Stock Option.

(c)Exercise Price. The Board shall establish the exercise price of each Option or the formula by which such exercise price will be determined. The exercise price shall be specified in the applicable Option agreement. The exercise price shall be not less than 100% of the Grant Date Fair Market Value (as defined below) of the Common Stock on the date the Option is granted; provided that if the Board approves the grant of an Option with an exercise price to be determined on a future date, the exercise price shall be not less than 100% of the Grant Date Fair Market Value" of a share of Common Stock for purposes of the Plan will be determined as follows:

(1)if the Common Stock trades on a national securities exchange, the closing sale price (for the primary trading session) on the applicable date; or

(2)if the Common Stock does not trade on any such exchange, the average of the closing bid and asked prices on the applicable date as reported by an over-the-counter marketplace designated by the Board; or

(3)if the Common Stock is not publicly traded, the Board will determine the Grant Date Fair Market Value for purposes of the Plan using any measure of value it determines to be appropriate (including, as it considers appropriate, relying on appraisals) in a manner consistent with the valuation principles under Code Section 409A, except as the Board may expressly determine otherwise.

For any date that is not a trading day, the Grant Date Fair Market Value of a share of Common Stock for such date will be determined by using the closing sale price or average of the bid and asked prices, as appropriate, for the immediately preceding trading day and with the timing in the formulas above adjusted accordingly. The Board can substitute a particular time of day or other measure of "closing sale price" or "bid and asked prices" if appropriate because of exchange or market procedures or can, in its sole discretion, use weighted averages either on a daily basis or such longer period as complies with Code Section 409A.

The Board has sole discretion to determine the Grant Date Fair Market Value for purposes of the Plan, and all Awards are conditioned on the Participant's agreement that the Administrator's determination is conclusive and binding even though others might make a different determination.

(d)Duration of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable Option agreement; provided, however, that no Option will be granted with a term in excess of 10 years.

(e)Exercise of Options. Options may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic) approved by the Company, together with payment in full (in the manner specified in Section 5(f)) of the exercise price for the number of shares for which the Option is exercised. Shares of Common Stock subject to the Option will be delivered by the Company as soon as practicable following exercise.

(f)Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

(1)in cash or by check, payable to the order of the Company;

(2)except as may otherwise be provided in the applicable Option agreement or approved by the Board, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;

(3)to the extent provided for in the applicable Option agreement or approved by the Board, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their fair market value (valued in the manner determined by (or in a manner approved by) the Board), provided (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the Company, was owned by the Participant for such minimum period of time, if any, as may be established by the Board and (iii) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements;

A-4

(4)to the extent provided for in the applicable Nonstatutory Stock Option agreement or approved by the Board, by delivery of a notice of "net exercise" to the Company, as a result of which the Participant would receive (i) the number of shares underlying the portion of the Option being exercised, less (ii) such number of shares as is equal to (A) the aggregate exercise price for the portion of the Option being exercised divided by (B) the fair market value of the Common Stock (valued in the manner determined by (or in a manner approved by) the Board) on the date of exercise;

(5)to the extent permitted by applicable law and provided for in the applicable Option agreement or approved by the Board, by payment of such other lawful consideration as the Board may determine; provided, however, that in no event may a promissory note of the Participant be used to pay the Option exercise price; or

(6)by any combination of the above permitted forms of payment.

(g)Limitation on Repricing. Unless such action is approved by the Company's stockholders, the Company may not (except as provided for under Section 10): (1) amend any outstanding Option granted under the Plan to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Option, (2) cancel any outstanding option (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan (other than Awards granted pursuant to Section 4(c)) covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option, (3) cancel in exchange for a cash payment any outstanding Option with an exercise price per share above the then-current fair market value of the Common Stock (valued in the manner determined by (or in a manner approved by) the Board), or (4) take any other action under the Plan that constitutes a "repricing" within the meaning of the rules of the NASDAQ Stock Market ("NASDAQ").

(h)Minimum Vesting. No Option that vests solely based on the passage of time that is granted to an employee in conjunction with his or her commencement of employment shall vest earlier than the first anniversary of its date of grant or the date of commencement of employment, whichever is earlier. Notwithstanding the foregoing, the Board, either at the time the Option is granted or at any time thereafter, may allow an Option to accelerate and become vested, in whole or in part, prior to the first anniversary of its date of grant, in the event of the death or disability of the Participant, the termination of the Participant's employment by or service to the Company under specified circumstances or in connection with a merger, consolidation, sale, reorganization, recapitalization or change in control of the Company.

(i)No Reload Options. No Option granted under the Plan shall contain any provision entitling the Participant to the automatic grant of additional Options in connection with any exercise of the original Option.

(j)No Dividend Equivalents. No Option shall provide for the payment or accrual of dividend equivalents.

6. Stock Appreciation Rights

(a)General. The Board may grant Awards consisting of stock appreciation rights ("SARs") entitling the holder, upon exercise, to receive an amount of Common Stock or cash or a combination thereof (such form to be determined by the Board) determined by reference to appreciation, from and after the date of grant, in the fair market value of a share of Common Stock (valued in the manner determined by (or in a manner approved by) the Board) over the measurement price established pursuant to Section 6(b). The date as of which such appreciation is determined shall be the exercise date.

(b)Measurement Price. The Board shall establish the measurement price of each SAR and specify it in the applicable SAR agreement. The measurement price shall not be less than 100% of the Grant Date Fair Market Value of the Common Stock on the date the SAR is granted; provided that if the Board approves the grant of an SAR effective as of a future date, the measurement price shall be not less than 100% of the Grant Date Fair Market Value on such

future date.

A-5

(c)Duration of SARs. Each SAR shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable SAR agreement; provided, however, that no SAR will be granted with a term in excess of 10 years.

(d)Exercise of SARs. SARs may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic) approved by the Company, together with any other documents required by the Board.

(e)Limitation on Repricing. Unless such action is approved by the Company's stockholders, the Company may not (except as provided for under Section 10): (1) amend any outstanding SAR granted under the Plan to provide a measurement price per share that is lower than the then-current measurement price per share of such outstanding SAR, (2) cancel any outstanding SAR (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan (other than Awards granted pursuant to Section 4(c)) covering the same or a different number of shares of Common Stock and having a measurement price per share lower than the then-current measurement price per share of the cancelled SAR, (3) cancel in exchange for a cash payment any outstanding SAR with a measurement price per share above the then-current fair market value of the Common Stock (valued in the manner determined by (or in a manner approved by) the Board), or (4) take any other action under the Plan that constitutes a "repricing" within the meaning of the rules of the NASDAQ.

(f)No Reload SARs. No SAR granted under the Plan shall contain any provision entitling the Participant to the automatic grant of additional SARs in connection with any exercise of the original SAR.

(g)No Dividend Equivalents. No SAR shall provide for the payment or accrual of dividend equivalents.

7. Restricted Stock; RSUs

(a)General. The Board may grant Awards entitling recipients to acquire shares of Common Stock ("Restricted Stock"), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award. The Board may also grant Awards entitling the recipient to receive shares of Common Stock or cash to be delivered at the time such Award vests ("RSUs").

(b)Terms and Conditions for Restricted Stock and RSUs. The Board shall determine the terms and conditions of Restricted Stock and RSUs, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.

(c)Additional Provisions Relating to Restricted Stock.

(1)Dividends. Any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Restricted Stock ("Unvested Dividends") shall be paid to the Participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. Each payment of Unvested Dividends will be made no later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the lapsing of the restrictions on transferability and the forfeitability provisions applicable to the underlying shares of Restricted Stock. No interest will be paid on Unvested Dividends.

(2)Stock Certificates. The Company may require that any stock certificates issued in respect of shares of Restricted Stock, as well as dividends or distributions paid on such Restricted Stock, shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to

such restrictions to the Participant or if the Participant has died, to his or her Designated Beneficiary. "Designated Beneficiary" means (i) the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death or (ii) in the absence of an effective designation by a Participant, the Participant's estate.

(d)Additional Provisions Relating to RSUs.

(1)Settlement. Upon the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each RSU, the Participant shall be entitled to receive from the Company the number of shares of Common Stock specified in the Award agreement or (if so provided in the applicable Award agreement or otherwise determined by the Board) an amount of cash equal to the fair market value (valued in the manner determined by (or in a manner approved by) the Board) of such number of shares or a combination thereof. The Board may provide that settlement of RSUs shall be deferred, on a mandatory basis or at the election of the Participant, in a manner that complies with Section 409A of the Code or any successor provision thereto, and the regulations thereunder ("Section 409A").

(2)Voting Rights. A Participant shall have no voting rights with respect to any RSUs.

(3)Dividend Equivalents. The Award agreement for RSUs may provide Participants with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock ("Dividend Equivalents"). Dividend Equivalents shall be credited to an account for the Participant, may be settled in cash and/or shares of Common Stock as provided in the Award agreement, and shall be subject to the same restrictions on transfer and forfeitability as the RSUs with respect to which paid. No interest will be paid on Dividend Equivalents.

8. Other Stock-Based and Cash-Based Awards

(a)General. The Board may grant other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property ("Other Stock-Based Awards"). Such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock-Based Awards may be paid in shares of Common Stock or cash, as the Board shall determine. The Company may also grant Awards denominated in cash rather than shares of Common Stock ("Cash-Based Awards").

(b)Terms and Conditions. Subject to the provisions of the Plan, the Board shall determine the terms and conditions of each Other Stock-Based Award or Cash-Based Award, including any purchase price applicable thereto.

(c)Dividend Equivalents. The Award agreement for an Other Stock-Based Award may provide Participants with the right to receive Dividend Equivalents. Dividend Equivalents shall be credited to an account for the Participant, may be settled in cash and/or shares of Common Stock as provided in the Award agreement, and shall be subject to the same restrictions on transfer and forfeitability as the Other Stock-Based Award with respect to which paid. No interest will be paid on Dividend Equivalents.

9. Performance Awards.

(a)Grants. Awards under the Plan may be made subject to the achievement of performance goals pursuant to this Section 9 ("Performance Awards").

(b)Performance Measures. The Board may specify that the degree of granting, vesting and/or payout shall be subject to the achievement of one or more objective performance measures established by the Board, which may be based on the relative or absolute attainment of any combination of the following, which may be determined in accordance with generally accepted accounting principles ("GAAP") or on a non-GAAP or other basis, as determined by the Board: (i) the entry into an arrangement or agreement with a third party for the development, commercialization, marketing or distribution of products, services or technologies, or for conducting a research program to discover and develop a product, service or technology, and/or the achievement of milestones under such arrangement or agreement,

including events that trigger an obligation or payment right; (ii) achievement of domestic and international regulatory milestones, including the submission of filings required to advance products, services and technologies in clinical development and the achievement of approvals by regulatory authorities relating to the commercialization of products, services and technologies; (iii) the achievement of discovery, preclinical and clinical

stage scientific objectives, discoveries or inventions for products, services and technologies under research and development; (iv) the entry into or completion of a phase of clinical development for any product, service or technology, such as the entry into or completion of phase 1, 2 and/or 3 clinical trials; (v) the consummation of debt or equity financing transactions, or acquisitions of business, technologies and assets; (vi) new product or service releases; (vii) the achievement of qualitative or quantitative performance measures set forth in operating plans approved by the Board from time to time; (viii) specified levels of product sales, net income, earnings before or after discontinued operations, interest, taxes, depreciation and/or amortization, operating profit before or after discontinued operations and/or taxes, sales, sales growth, earnings growth, cash flow or cash position, gross margins, stock price, market share, return on sales, assets, equity or investment; (ix) improvement of financial ratings; (x) achievement of balance sheet or income statement objectives; (xi) total stockholder return; (xii) other comparable measures of financial and operational performance; and/ or (xiii) any other measure selected by the Board. Such goals may reflect, as applicable, absolute entity or business unit performance or a relative comparison to the performance of a peer group of entities or other external measure of the selected performance criteria and may be absolute in their terms or measured against or in relationship to other companies comparably, similarly or otherwise situated. The Board may specify that such performance measures shall be adjusted to exclude any one or more of (i) extraordinary items, (ii) gains or losses on the dispositions of discontinued operations, (iii) the cumulative effects of changes in accounting principles, (iv) the writedown of any asset, (v) charges for restructuring and rationalization programs; and/or (vi) any other factors that the Board may determine. Such performance measures: (i) may vary by Participant and may be different for different Awards; (ii) may be particular to a Participant or the department, branch, line of business, subsidiary or other unit in which the Participant works and (iii) may cover such period as may be specified by the Board. The Board shall have the authority to make equitable adjustments to the performance goals in recognition of unusual or non-recurring events affecting the Company or the financial statements of the Company, in response to changes in applicable laws or regulations or to account for items of gain, loss or expense determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principles.

(c)Adjustments. The Board may adjust the cash or number of shares payable pursuant to such Performance Award, and the Board may, at any time, waive the achievement of the applicable performance measures, including in the case of the death or disability of the Participant or a change in control of the Company.

10. Adjustments for Changes in Common Stock and Certain Other Events

(a)Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under the Plan, (ii) the share counting rules set forth in Section 4(a), (iii) the number and class of securities and exercise price per share of each outstanding Option, (iv) the share and per-share provisions and the measurement price of each outstanding SAR, (v) the number of shares subject to and the repurchase price per share subject to each outstanding award of Restricted Stock and (vi) the share and per-share-related provisions and the purchase price, if any, of each outstanding RSU and each Other Stock-Based Award, shall be equitably adjusted by the Company (or substituted Awards may be made, if applicable) in the manner determined by the Board. Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to an outstanding Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

(b)Reorganization and Change in Control Events.

(1)Definitions.

(A)A "Reorganization Event" shall mean: (i) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is canceled, (ii) any transfer or disposition of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (iii) any liquidation or dissolution of the Company.

(B)A "Change in Control Event" shall mean:

(i)the acquisition by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934 (the "Exchange Act")) (a "Person") of beneficial ownership of any capital stock of the Company if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d-3 promulgated under the Exchange Act) 50% or more of either (x) the then-outstanding shares of common stock of the Company (the "Outstanding Company Common Stock") or (y) the combined voting power of the then-outstanding securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); provided, however, that for purposes of this subsection (i), the following acquisitions shall not constitute a Change in Control Event: (I) any acquisition directly from the Company (excluding an acquisition pursuant to the exercise, conversion or exchange of any security exercisable for, convertible into or exchangeable for common stock or voting securities of the Company, unless the Person exercising, converting or exchanging such security acquired such security directly from the Company or an underwriter or agent of the Company), (II) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company, or (III) any acquisition by any corporation pursuant to a Business Combination (as defined below) which complies with clauses (x) and (y) of subsection (ii) of this definition; or

(ii) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange involving the Company or a sale or other disposition of all or substantially all of the assets of the Company (a "Business Combination"), unless, immediately following such Business Combination, each of the following two conditions is satisfied: (x) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then-outstanding shares of common stock and the combined voting power of the then-outstanding securities entitled to vote generally in the election of directors, respectively, of the resulting or acquiring corporation in such Business Combination (which shall include, without limitation, a corporation which as a result of such transaction owns the Company or substantially all of the Company's assets either directly or through one or more subsidiaries) (such resulting or acquiring corporation is referred to herein as the "Acquiring Corporation") in substantially the same proportions as their ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities, respectively, immediately prior to such Business Combination and (y) no Person (excluding any employee benefit plan (or related trust) maintained or sponsored by the Company or by the Acquiring Corporation) beneficially owns, directly or indirectly, 50% or more of the then-outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the extent that such ownership existed prior to the Business Combination); or

(iii)such time as the Continuing Directors (as defined below) do not constitute a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term "Continuing Director" means at any date a member of the Board (x) who was a member of the Board on the date of the initial adoption of this Plan by the Board or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (y) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or

(iv)the liquidation or dissolution of the Company.

Notwithstanding anything herein to the contrary, to the extent required to comply with Section 409A, no event shall constitute a Change in Control Event unless such event also constitutes a "change in control event" within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(i).

(C)"Cause" shall mean conduct involving one or more of the following: (i) the conviction of the employee of, or, plea of guilty or nolo contendere to, any crime involving dishonesty or any felony; (ii) the willful misconduct by the employee resulting in material harm to the Company; (iii) fraud, embezzlement, theft or dishonesty by the employee against the Company resulting in material harm to the Company; (iv) the repeated and continuing failure of the employee to follow the proper and lawful directions of the Company's Chief Executive Officer or the Board after a written demand is delivered to the employee that specifically identifies the manner in which the Chief Executive Officer or the Board after the Employee has failed to follow such instructions; (v) the employee's current alcohol or prescription drug abuse affecting work performance, or current illegal use of drugs regardless of the effect on work performance; (vi) material violation of the Company's code of conduct by the employee that causes harm to the Company; or (vii) violation of any applicable written proprietary information, confidentiality, non-competition and/or non-solicitation agreements with the Company.

(2)Effect on Awards Other than Restricted Stock.

(A)Reorganization Event. Upon the occurrence of a Reorganization Event (regardless of whether such event also constitutes a Change in Control Event), or the execution by the Company of any agreement with respect to a Reorganization Event (regardless of whether such event will result in a Change in Control Event), the Board shall provide that all outstanding Awards other than Restricted Stock shall be assumed, or equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof); provided that if such Reorganization Event also constitutes a Change in Control Event, except to the extent specifically provided to the contrary in the instrument evidencing any Award other than Restricted Stock or any other agreement between a Participant and the Company, such assumed or substituted Awards that are held by employees of the Company shall become immediately exercisable if, on or prior to the first anniversary of the date of the consummation of the Reorganization Event, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated without Cause by the Company or the acquiring or succeeding corporation. For purposes hereof, an Award shall be considered to be assumed if, following consummation of the Reorganization Event, the Award confers the right to purchase or receive, as applicable, for each share of Common Stock subject to the Award immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise or settlement of Awards to consist solely of common stock of the acquiring or succeeding corporation (or an affiliate thereof) equivalent in value (as determined by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

Notwithstanding the foregoing, if the acquiring or succeeding corporation (or an affiliate thereof) does not agree to assume, or substitute for, such Awards other than Restricted Stock, or in the event of a liquidation or dissolution of the Company, the Board shall, upon written notice to the Participants, provide that all Awards other than Restricted Stock will become vested as of a specified time prior to the Reorganization Event and will terminate immediately prior to the consummation of such Reorganization Event, except, in the case of Options, to the extent exercised by the Participants before the consummation of such Reorganization Event; provided, however, that in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share of Common Stock surrendered pursuant to such Reorganization Event (the "Acquisition Price"), then the Board may instead provide that all outstanding Awards other than Restricted Stock shall terminate upon consummation of such Reorganization Event and that each Participant shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (A) the Acquisition Price multiplied by the number of shares of

Common Stock subject to such outstanding Award (whether or not then exercisable), exceeds (B) the aggregate exercise price, if any, of such Award and any applicable tax withholdings.

Notwithstanding the terms of Section 10(b)(2)(A), in the case of outstanding RSUs that are subject to Section 409A: (i) if the applicable RSU agreement provides that the RSUs shall be settled upon a "change in control event" within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(i), and the Reorganization Event or Change in Control Event constitutes such a "change in control event", then no assumption or substitution shall be permitted pursuant to Section 10(b)(2)(A) and the RSUs shall instead be settled in accordance with the terms of the applicable RSU agreement; and (ii) the Board may only undertake the actions set forth in Section 10(b)(2)(A) if the Reorganization Event or Change in Control Event constitutes a "change in control event" as defined under Treasury Regulation Section 1.409A-3(i)(5)(i)and such action is permitted or required by Section 409A; if the Reorganization Event or Change in Control Event is not a "change in control event" as odefined or such action is not permitted or required by Section 409A, and the acquiring or succeeding corporation does not assume or substitute the RSUs pursuant to Section 10(b)(2)(A), then the unvested RSUs shall terminate immediately prior to the consummation of the Reorganization Event or Change in Control Event without any payment in exchange therefor.

(B)Change in Control Event that is not a Reorganization Event. Upon the occurrence of a Change in Control Event that does not also constitute a Reorganization Event, except to the extent specifically provided to the contrary in the instrument evidencing any Award other than Restricted Stock or any other agreement between a Participant and the Company, each such Award other than Restricted Stock that is held by an employee of the Company shall be immediately vested if, on or prior to the first anniversary of the date of the consummation of the Change in Control Event, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated without Cause by the Company or the acquiring or succeeding corporation.

(3)Effect on Restricted Stock Awards

(A)Reorganization Event that is not a Change in Control Event. Upon the occurrence of a Reorganization Event that is not a Change in Control Event, the repurchase and other rights of the Company under each outstanding Award of Restricted Stock shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to the Common Stock subject to such Award of Restricted Stock.

(B)Change in Control Event. Upon the occurrence of a Change in Control Event (regardless of whether such event also constitutes a Reorganization Event), except to the extent specifically provided to the contrary in the instrument evidencing any Award of Restricted Stock or any other agreement between a Participant and the Company, each such Award of Restricted Stock held by employees of the Company shall immediately become free from all conditions or restrictions if, on or prior to the first anniversary of the date of the consummation of the Change in Control Event, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated without Cause by the Company or the acquiring or succeeding corporation.

11. General Provisions Applicable to Awards

(a)Transferability of Awards. Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by a Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an Incentive Stock Option, pursuant to a qualified domestic relations order, and, during the life of the Participant, shall be exercisable only by the Participant; provided, however, that, except with respect to Awards subject to Section 409A, the Board may permit or provide in an Award for the gratuitous transfer of the Award by the Participant to or for the benefit of any immediate family member, family trust or other entity established for the benefit of the Participant and/or an immediate family member thereof if the Company would be eligible to use a Form S-8 under the Securities Act for the registration of the sale of the Common Stock subject to such Award to such proposed transferee; provided further, that the Company shall not be required to recognize any such permitted transfer until such time as such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument in form and substance satisfactory to the Company confirming that such transferee shall be bound by all of

the terms and conditions of the Award. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees. For the avoidance of doubt, nothing contained in this Section 11(a) shall be deemed to restrict a transfer to the Company.

(b)Documentation. Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.

(c)Termination of Status. The Board shall determine the effect on an Award of the disability, death, termination or other cessation of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights, or receive any benefits, under an Award.

(d)Withholding. The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Common Stock under an Award. The Company may elect to satisfy the withholding obligations through additional withholding on salary or wages. If the Company elects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise, vesting or release from forfeiture of an Award or at the same time as payment of the exercise or purchase price, unless the Company determines otherwise. If provided for in an Award or approved by the Board, a Participant may satisfy the tax obligations in whole or in part by delivery (either by actual delivery or attestation) of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their fair market value (valued in the manner determined by (or in a manner approved by) the Company); provided, however, except as otherwise provided by the Board, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income), except that, to the extent that the Company is able to retain shares of Common Stock having a fair market value (determined by, or in a manner approved by, the Company) that exceeds the statutory minimum applicable withholding tax without financial accounting implications or the Company is withholding in a jurisdiction that does not have a statutory minimum withholding tax, the Company may retain such number of shares of Common Stock (up to the number of shares having a fair market value equal to the maximum individual statutory rate of tax (determined by, or in a manner approved by, the Company)) as the Company shall determine in its sole discretion to satisfy the tax liability associated with any Award. Shares used to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.

(e)Amendment of Award. Except as otherwise provided in Sections 5(g) and 6(e) related to repricings, the Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option. The Participant's consent to such action shall be required unless (i) the Board determines that the action, taking into account any related action, does not materially and adversely affect the Participant's rights under the Plan or (ii) the change is permitted under Section 10.

(f)Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously issued or delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and regulations and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(g)Acceleration. The Board may at any time provide that any Award shall become immediately exercisable in whole or in part, free from some or all restrictions or conditions or otherwise realizable in whole or in part, as the case may be.

12. Miscellaneous

(a)No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award by virtue of the adoption of the Plan, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

(b)No Rights As Stockholder; Clawback. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be issued with respect to an Award until becoming the record holder of such shares. In accepting an Award under the Plan, the Participant agrees to be bound by any clawback policy that the Company has in effect or may adopt in the future.

(c)Effective Date and Term of Plan. The Plan shall become effective on the Effective Date. No Awards shall be granted under the Plan after the expiration of 10 years from the Effective Date, but Awards previously granted may extend beyond that date.

(d)Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time provided that (i) neither Section 5(g) nor 6(e) requiring stockholder approval of any option or SAR repricing may be amended without stockholder approval; (ii) no amendment that would require stockholder approval under the rules of the national securities exchange on which the Company then maintains its primary listing may be made effective unless and until the Company's stockholders approve such amendment; and (iii) if the national securities exchange on which the Company then maintains its primary listing does not have rules regarding when stockholder approval of amendments to equity compensation plans is required (or if the Company's Common Stock is not then listed on any national securities exchange), then no amendment to the Plan (A) materially increasing the number of shares authorized under the Plan (other than pursuant to Section 4(c) or 10), (B) expanding the types of Awards that may be granted under the Plan, or (C) materially expanding the class of participants eligible to participate in the Plan shall be effective unless and until the Company's stockholders approve such amendment. In addition, if at any time the approval of the Company's stockholders is required as to any other modification or amendment under Section 422 of the Code or any successor provision with respect to Incentive Stock Options, the Board may not effect such modification or amendment without such approval. Unless otherwise specified in the amendment, any amendment to the Plan adopted in accordance with this Section 12(d) shall apply to, and be binding on the holders of, all Awards outstanding under the Plan at the time the amendment is adopted, provided the Board determines that such amendment, taking into account any related action, does not materially and adversely affect the rights of Participants under the Plan. No Award shall be made that is conditioned upon stockholder approval of any amendment to the Plan unless the Award provides that (i) it will terminate or be forfeited if stockholder approval of such amendment is not obtained within no more than 12 months from the date of grant and (2) it may not be exercised or settled (or otherwise result in the issuance of Common Stock) prior to such stockholder approval.

(e)Authorization of Sub-Plans (including for Grants to non-U.S. Employees). The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable securities, tax or other laws of various jurisdictions. The Board shall establish such sub-plans by adopting supplements to the Plan containing (i) such limitations on the Board's discretion under the Plan as the Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.

(f)Compliance with Section 409A of the Code. If and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes "nonqualified deferred compensation" within the meaning of Section 409A and (ii) the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of "separation from service" (as determined under Section 409A) (the "New Payment Date"), except as Section 409A may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A but do not to satisfy the conditions of that section.

(g)Limitations on Liability. Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, employee or agent of the Company will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan, nor will such individual be personally liable with respect to the Plan because of any contract or other instrument he or she executes in his or her capacity as a director, officer, employee or agent of the Company. The Company will indemnify and hold harmless each director, officer, employee or agent of the Company to whom any duty or power relating to the administration or interpretation of the Plan has been or will be delegated, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Board's approval) arising out of any act or omission to act concerning the Plan unless arising out of such person's own fraud or bad faith.

(h)Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than the State of Delaware.

Appendix B

CERTIFICATE OF AMENDMENT

OF

RESTATED CERTIFICATE OF INCORPORATION

OF

AVEO PHARMACEUTICALS, INC.

AVEO Pharmaceuticals, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify as follows:

1. The name of the Corporation is AVEO Pharmaceuticals, Inc.

2. Article FOURTH of the Restated Certificate of Incorporation of the Corporation, is hereby amended by replacing the first paragraph thereof with the following:

"FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 505,000,000 shares, consisting of (i) 500,000,000 shares of Common Stock, \$0.001 par value per share ("Common Stock") and (ii) 5,000,000 shares of Preferred Stock, \$0.001 par value per share ("Preferred Stock")."

3. This Certificate of Amendment has been duly adopted by the Board of Directors and stockholders of the Corporation in accordance with Section 242 of the General Corporation Law.

IN WITNESS WHEREOF, the Corporation has caused its duly authorized officer to execute this Certificate of Amendment on this day of , 2019.

AVEO PHARMACEUTICALS, INC.

By: Name: Title: Appendix C

CERTIFICATE OF AMENDMENT

OF

RESTATED CERTIFICATE OF INCORPORATION

OF

AVEO PHARMACEUTICALS, INC.

AVEO Pharmaceuticals, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify as follows:

1. The current name of the Corporation is AVEO Pharmaceuticals, Inc.

2. The Board of Directors of the Corporation duly adopted resolutions pursuant to Section 242 of the General Corporation Law proposing the amendment set forth in this Certificate of Amendment of the Restated Certificate of Incorporation of the Corporation, (as amended, the "Restated Certificate"), declaring the advisability of the amendment set forth in this Certificate of Amendment of the Restated Certificate and authorizing the appropriate officers of the Corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment is as follows:

RESOLVED, that Article FOURTH of the Restated Certificate be amended by replacing the first paragraph thereof with the following:

"FOURTH: Effective upon the filing of this Certificate of Amendment of the Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the "Effective Time"), each five (5) to fifteen (15) shares of the Corporation's common stock, par value \$0.001 per share (the "Common Stock"), issued and outstanding or held by the Corporation in treasury immediately prior to the Effective Time shall be reclassified and combined into one validly issued, fully paid and nonassessable share of outstanding Common Stock or treasury share, as applicable, automatically and without any action by the holder thereof upon the Effective Time and shall represent one share of Common Stock from and after the Effective Time (such reclassification and combination of shares, the "Reverse Stock Split"). The exact ratio of the Reverse Stock Split within such five (5) to fifteen (15) range shall be determined by the Board of Directors of the Corporation and publicly announced by the Corporation prior to the Effective Time. The par value of the Common Stock following the Reverse Stock Split shall remain at \$0.001 par value per share. No fractional shares of Common Stock shall be issued as a result of the Reverse Stock Split and, in lieu thereof, upon surrender after the Effective Time of a certificate which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, any person who would otherwise be entitled to a fractional share of Common Stock as a result of the Reverse Stock Split, following the Effective Time, shall be entitled to receive a cash payment (without interest) equal to the fraction of a share of Common Stock to which such holder would otherwise be entitled multiplied by the average (after taking into account the exact ratio of the Reverse Stock Split determined by the Board of Directors of the Corporation) of the high and low trading prices of the Common Stock on The Nasdaq Capital Market during regular trading hours for the five trading days immediately preceding the Effective Time.

Each stock certificate that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares formerly represented by such certificate have been reclassified (as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time); provided, however, that each person of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new certificate evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Stock after the Effective Time into whole shares of Common Stock after the Effective Time into whole shares of Stock after the Effective Time into whole shares of such certificate, a new certificate evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been reclassified.

C-1

The total number of shares of all classes of stock which the Corporation shall have authority to issue is $[__]^1$ shares, consisting of

(i) [____]² shares of Common Stock, \$0.001 par value per share ("Common Stock") and

(ii) 5,000,000 shares of Preferred Stock, \$0.001 par value per share ("Preferred Stock")."

This Certificate of Amendment of the Restated Certificate has been duly adopted by the stockholders of the Corporation in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, the Corporation has caused its duly authorized officer to execute this Certificate of Amendment on this day of , 2019.

AVEO PHARMACEUTICALS, INC.

By: Name: Title:

- ¹ This number will be equal to the sum of (x) 5,000,000 shares of Preferred Stock plus (y) a number of shares of Common Stock ascertained by dividing (i) the total number of authorized shares of Common Stock set forth in the Restated Certificate as in effect immediately prior to the Effective Time by (ii) the number (between five (5) and fifteen (15)) that equals the number of shares of Common Stock to be reclassified into one share of Common Stock, as determined by the Board of Directors of the Corporation and publicly announced by the Corporation prior to the Effective Time in accordance with the first paragraph of Article FOURTH.
- ² This number will be equal to a number of shares of Common Stock ascertained by dividing (i) the total number of authorized shares of Common Stock set forth in the Restated Certificate as in effect immediately prior to the Effective Time by (ii) the number (between five (5) and fifteen (15)) that equals the number of shares of Common Stock to be reclassified into one share of Common Stock, as determined by the Board of Directors of the Corporation and publicly announced by the Corporation prior to the Effective Time in accordance with the first

paragraph of Article FOURTH. C-2

ANNUAL MEETING OF AVEO PHARMACEUTICALS, INC. Date: Wednesday, June 12, 2019 Time: 10:00 a.m. MA 02110 Please make your marks like this: ÈUse dark black pencil or pen only The Board of Directors Recom '' ' compensation. For Against Abstain 3. To approve the AVEO Pharmaceuticals, Inc. 2019 '

' ' Equity Incentive Plan. For Against Abstain 4. To approve an amendment to our Restated Certificate '

of Incorporation to increase the number of authorized shares of our common stock from 250,000,000 to500,000,0
 Incorporation to effect reverse stock split of ourcommon stock, by ratio of not less than 1-for-

5 andnot more than 1-for-15, and proportionate reductionin the number of authorized shares of common stock,

such ratio and the implementation and timing of thereverse stock split to be determined in the discretion of our board '' ' independent registered public accounting firm for theyear ending December 31, 2019. To attend the meeting a Please separate carefully at the perforation and return just this portion in the envelope provided. Annual Meeting of for Holders as of April 15, 2019

This proxy is being solicited on behalf of the Board of Directors VOTE BY: INTERNET

TELEPHONE Go To Call www.proxypush.com/AVEO 1-866-230-6355 • Cast your

vote online 24 hours a• Use any touch-tone telephone toll-free 24 hours a day/7day/

7 days a week. OR days a week. • Have your Proxy Card/Voting• Have your Proxy Card/Voting Instruction Form r Instructions Form ready. • Follow the simple recorded instructions. MAIL • View Meeting Documents. OR • Mark, s thereof upon the matters specified and upon such other matters as may be properly brought before the meeting or an AVEO Pharmaceuticals,

Inc. c/o MEDIANT COMMUNICATIONS P.O. BOX 8016 CARY, NC 27512-9903 Please Sign Here Please Date A should include title and authority. Corporations should provide full name of corporation and title of authorized officer