

Karyopharm Therapeutics Inc.
Form DEF 14A
April 19, 2019
Table of Contents

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
(Amendment No.)

Filed by the Registrant

Filed by a party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

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

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Under §240.14a-12

Karyopharm Therapeutics 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:

Table of Contents

85 Wells Avenue, Newton, Massachusetts 02459

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON THURSDAY, JUNE 6, 2019

Dear Stockholder:

You are cordially invited to our 2019 Annual Meeting of Stockholders (the Annual Meeting) on Thursday, June 6, 2019, beginning at 8:00 a.m., Eastern time, at our headquarters, 85 Wells Avenue, Newton, Massachusetts 02459, for the following purposes:

1. To elect three Class III directors to serve for a three-year term to expire at the 2022 annual meeting of stockholders;
2. To approve, on a non-binding advisory basis, the compensation of our named executive officers, as described in the Compensation Discussion and Analysis, executive compensation tables and accompanying narrative disclosures in this proxy statement;
3. To recommend, on a non-binding advisory basis, the frequency of future advisory votes on the compensation of our named executive officers;
4. To consider and vote upon the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2019;
5. To approve an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 100,000,000 to 200,000,000; and
6. To consider and vote upon such other business as may be properly brought before the meeting or any adjournment or postponement 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 19, 2019, we will begin mailing a Notice of Internet Availability of Proxy Materials, or Notice, to stockholders 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.

If you are a stockholder of record, you may vote in one of the following ways:

Vote over the Internet, by going to www.proxyvote.com (have your Notice or proxy card in hand when you access the website);

Vote by Telephone, by calling the toll-free number 1-800-690-6903 (have your Notice or proxy card in hand when you call);

Vote by Mail, if you received (or requested and received) a printed copy of the proxy materials, by returning the enclosed proxy card (signed and dated) in the envelope provided; or

Vote in person at the Annual Meeting.

Table of Contents

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

Our Board of Directors has fixed the close of business on April 12, 2019 as the record date for the determination of stockholders entitled to notice of, and to vote at, the Annual Meeting and any adjournment or postponement thereof.

Whether or not you plan to attend the Annual Meeting in person, we urge you to take the time to vote your shares.

By Order of the Board of Directors,

Michael G. Kauffman, M.D., Ph.D.

Chief Executive Officer

Newton, Massachusetts

April 19, 2019

Table of Contents

TABLE OF CONTENTS

| | |
|--|----|
| <u>GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING</u> | 1 |
| <u>PROPOSAL 1: ELECTION OF DIRECTORS</u> | 7 |
| <u>CORPORATE GOVERNANCE</u> | 12 |
| <u>General</u> | 12 |
| <u>Director Independence</u> | 12 |
| <u>Board Leadership Structure</u> | 13 |
| <u>The Board's Role in Risk Oversight</u> | 13 |
| <u>Board of Directors Meetings</u> | 14 |
| <u>Committees of the Board of Directors</u> | 14 |
| <u>Compensation Committee Interlocks and Insider Participation</u> | 17 |
| <u>Code of Business Conduct and Ethics</u> | 17 |
| <u>Director Nomination Process</u> | 17 |
| <u>Director Attendance at Annual Meetings</u> | 19 |
| <u>Communications with Our Board of Directors</u> | 19 |
| <u>Director Compensation</u> | 19 |
| <u>Limitation of Liability and Indemnification</u> | 21 |
| <u>Report of the Audit Committee of the Board of Directors</u> | 23 |
| <u>INFORMATION ABOUT EXECUTIVE OFFICER COMPENSATION</u> | 24 |
| <u>Compensation Discussion and Analysis</u> | 24 |
| <u>Hedging and Pledging Policy</u> | 35 |
| <u>Compensation Risk Assessment</u> | 35 |
| <u>Report of the Compensation Committee on Executive Compensation</u> | 35 |
| <u>Summary Compensation Table</u> | 36 |
| <u>2018 Grants of Plan-Based Awards Table</u> | 38 |
| <u>Outstanding Equity Awards at 2018 Year-End</u> | 39 |
| <u>2018 Option Exercises and Stock Vested Table</u> | 40 |
| <u>Employment Agreements, Severance and Change in Control Arrangements</u> | 40 |
| <u>Potential Payments Upon Termination or Change in Control</u> | 41 |
| <u>Non-Disclosure Agreements</u> | 44 |
| <u>Equity Compensation Plans and Other Benefits</u> | 45 |
| <u>CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS</u> | 51 |
| <u>Related Person Transactions</u> | 51 |
| <u>Policies and Procedures for Related Person Transactions</u> | 51 |
| <u>PROPOSAL 2: NON-BINDING ADVISORY VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS</u> | 53 |
| <u>PROPOSAL 3: NON-BINDING ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS</u> | 54 |
| <u>PROPOSAL 4: RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u> | 54 |
| <u>PROPOSAL 5: APPROVAL OF AN AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK</u> | 56 |
| <u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u> | 58 |
| <u>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</u> | 61 |
| <u>SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS</u> | 62 |

| | |
|--|-----|
| <u>STOCKHOLDER PROPOSALS</u> | 62 |
| <u>STOCKHOLDERS SHARING THE SAME ADDRESS</u> | 63 |
| <u>OTHER MATTERS</u> | 63 |
| <u>DIRECTIONS TO ANNUAL MEETING</u> | 63 |
| <u>APPENDIX A</u> | A-1 |

Table of Contents

85 Wells Avenue, Newton, Massachusetts 02459

PROXY STATEMENT FOR THE 2019 ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON THURSDAY, JUNE 6, 2019

The board of directors of Karyopharm Therapeutics Inc. (which we also refer to as Karyopharm or the company) is soliciting proxies for use at the 2019 annual meeting of stockholders, or the Annual Meeting, to be held at our headquarters, 85 Wells Avenue, Newton, Massachusetts 02459, on Thursday, June 6, 2019 at 8:00 a.m., Eastern time.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of

Stockholders to be Held on Thursday, June 6, 2019:

This proxy statement and our annual report are available electronically at www.proxyvote.com.

On or about April 19, 2019, we began mailing a Notice of Internet Availability of Proxy Materials, or Notice, to our stockholders (other than those who previously requested electronic or paper delivery of proxy materials), directing stockholders to a website where they can access our proxy materials, including this proxy statement and our Annual Report on Form 10-K, and view instructions on how to vote online or by telephone. If you would prefer to receive a paper copy of our proxy materials, please follow the instructions included in the Notice. If you have previously elected to receive our proxy materials electronically, you will continue to receive access to those materials via e-mail unless you elect otherwise.

GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Why did you send me these proxy materials?

We are providing these proxy materials because our board of directors is soliciting your proxy to vote at the Annual Meeting. This proxy statement summarizes information related to your vote at the Annual Meeting. All stockholders who find it convenient to do so are cordially invited to attend the Annual Meeting in person. However, you do not need to attend the meeting to vote your shares. Instead, you may vote your shares as described in further detail in the answer to the question How do I vote? below.

The Notice of Annual Meeting, proxy statement, and voting instructions, together with our Annual Report on Form 10-K for the year ended December 31, 2018, will be made available to each stockholder entitled to vote starting on or about April 19, 2019. These materials are available for viewing, printing and downloading on the Internet at www.proxyvote.com.

Who can vote at the Annual Meeting and what are the voting rights of such stockholders?

Only stockholders who owned our common stock on April 12, 2019 are entitled to vote at the Annual Meeting. On this record date, there were 60,864,445 shares of our common stock outstanding (each of which entitles its holder to one vote per share). Common stock is our only class of stock outstanding.

Table of Contents

What is the purpose of the Annual Meeting?

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

1. To elect three Class III directors to serve for a three-year term to expire at the 2022 annual meeting of stockholders;
2. To approve, on a non-binding advisory basis, the compensation of our named executive officers, as described in the Compensation Discussion and Analysis, executive compensation tables and accompanying narrative disclosures in this proxy statement;
3. To recommend, on a non-binding advisory basis, the frequency of future advisory votes on the compensation of our named executive officers;
4. To consider and vote upon the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2019;
5. To approve an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 100,000,000 to 200,000,000; and
6. To consider and vote upon such other business as may be properly brought before the meeting or any adjournment or postponement thereof.

How many votes do I have?

Each share of our common stock that you own as of April 12, 2019 entitles you to one vote.

How do I vote?

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

- (1) **Over the Internet:** Go to the website of our tabulator at www.proxyvote.com. Use the vote control number printed on the Notice (or your proxy card) to access your account and vote your shares. You must specify how you want your shares voted or your Internet vote cannot be completed and you will receive an error message. Your shares will be voted according to your instructions. You must submit your Internet proxy before 11:59 p.m., Eastern Time, on June 5, 2019, the day before the Annual Meeting, for your proxy to be validly submitted over the Internet and your vote to count.

- (2) **By Telephone:** Call 1-800-690-6903, toll free from the United States, Canada and Puerto Rico, and follow the recorded instructions. You will need to have the Notice (or your proxy card) in hand when you call. You must specify how you want your shares voted and confirm your vote at the end of the call or your telephone vote cannot be completed. Your shares will be voted according to your instructions. You must submit your telephonic proxy before 11:59 p.m., Eastern Time, on June 5, 2019, the day before the Annual Meeting, for your telephonic proxy to be valid and your vote to count.

- (3) **By Mail:** If you received a printed copy of the proxy materials, complete and sign your enclosed proxy card and mail it in the enclosed postage prepaid envelope to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717, where the proxy card must be received not later than June 5, 2019, the day before the Annual Meeting, for it to be valid and your vote to count. Your shares will be voted according to your instructions. If you return your proxy card but do not specify how you want your shares voted on any particular matter, they will be voted in accordance with the recommendations of our board of directors.

- (4) **In Person at the Annual 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.

Table of Contents

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

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

If you hold your shares of our common stock in multiple accounts, you should vote your shares as described above for each account.

Can I revoke or change my vote?

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

- (1) Vote over the Internet or by telephone as instructed above. Only your latest Internet or telephone vote is counted. You may not revoke or change your vote over the Internet or by telephone after 11:59 p.m., Eastern Time, on June 5, 2019.
- (2) Sign a new proxy card and submit it by mail to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717, where the proxy card must be received no later than June 5, 2019. Only your latest dated proxy will be counted.
- (3) Attend the Annual Meeting and vote in person as instructed above. Attending the Annual Meeting alone will not revoke your Internet vote, telephone vote, or proxy submitted by mail, as the case may be.
- (4) Give our Corporate Secretary written notice before or at the Annual Meeting that you want to revoke your proxy.

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

Will my shares be voted if I do not return my proxy or do not provide specific voting instructions in the proxy card or voting instruction form that I submit?

If your shares are registered directly in your name, your shares will not be voted if you do not vote over the Internet, by telephone, by returning your proxy by mail, or by ballot at the Annual Meeting. If you submit a proxy card without giving specific voting instructions on one or more matters listed in the notice for the Annual Meeting, your shares will be voted as recommended by our board of directors on such matters, and as the proxyholders may determine in their discretion how to vote with respect to any other matters properly presented for a vote at the Annual Meeting.

If your shares are held in street name, your brokerage firm may under certain circumstances vote your shares if you do not timely return your voting instructions. **Brokers can vote their customers' unvoted shares on discretionary matters but cannot vote such shares on non-discretionary matters.** If you do not timely return voting instructions to your brokerage firm to vote your shares, your brokerage firm may, on discretionary matters, either vote your shares or leave your shares unvoted.

Table of Contents

Proposal 1 (election of directors), Proposal 2 (the non-binding advisory vote on the compensation of our named executive officers) and Proposal 3 (the non-binding advisory vote on the frequency of future votes on the compensation of our named executive officers) are non-discretionary matters. If you do not instruct your brokerage firm how to vote with respect to any of these proposals, your brokerage firm may not vote with respect to such proposal or proposals, and those shares that would have otherwise been entitled to be voted will be counted as broker non-votes. Broker non-votes are shares that are held in street name by a brokerage firm that indicates on its proxy that it does not have or did not exercise discretionary authority to vote on a particular matter. Proposal 4 (ratification of the selection of our independent registered public accounting firm) and Proposal 5 (amendment to our Restated Certificate of Incorporation) are considered discretionary matters, and your brokerage firm will be able to vote on these proposals even if it does not timely receive instructions from you, so long as it holds your shares in its name. We encourage you to timely provide voting instructions to your brokerage firm or other nominee. This ensures that your shares will be voted at the Annual Meeting according to your instructions. You should receive directions from your brokerage firm or other nominee about how to submit your voting instructions to them.

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

A majority in voting power of our shares of common stock outstanding at the record date must be present in person or represented by proxy to hold the Annual Meeting and conduct business. This is called a quorum. For purposes of determining whether a quorum exists, we count as present any shares that are voted over the Internet, by telephone, by completing and submitting a proxy by mail, or that are represented in person at the meeting. Further, for purposes of establishing a quorum, we will count as present shares that a stockholder holds even if the stockholder votes to abstain or only votes on one of the proposals. In addition, we will count as present shares held in street name by banks, brokerage firms, or nominees who indicate on their proxies that they do not have discretionary authority to vote those shares on Proposals 1, 2 and 3, or broker non-votes. If a quorum is not present, we expect to adjourn the Annual Meeting until we obtain a quorum.

The presence at the Annual Meeting, in person or by proxy, of holders representing a majority of our outstanding common stock as of April 12, 2019, or 30,432,223 shares, constitutes a quorum at the Annual Meeting, permitting us to conduct the business of the Annual Meeting.

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

Proposal 1 Election of Directors

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

vote FOR the nominees;

vote FOR one or more nominees and WITHHOLD your vote from the other nominees; or

WITHHOLD your vote from the 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 Non-binding Advisory Vote on the Compensation of Our Named Executive Officers

To approve Proposal 2, stockholders holding a majority of the votes cast on the matter must vote FOR the approval of the compensation of our named executive officers, as described in the Compensation Discussion

- 4 -

Table of Contents

and Analysis, executive compensation tables and accompanying narrative disclosures in this proxy statement.

Proposal 2 is a non-discretionary matter. Therefore, if your shares are held by your bank, broker or other nominee in street name and you do not vote your shares, your bank, broker or other nominee cannot vote your shares on Proposal 2, and your non-vote will have no effect on the outcome of this proposal. If you vote to ABSTAIN 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 Proposal 2. As a result, voting to ABSTAIN will have no effect on the voting on Proposal 2.

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). However, our compensation committee and our 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 our named executive officers.

Proposal 3 Non-binding Advisory Vote on the Frequency of Future Advisory Votes on the Compensation of Our Named Executive Officers

To recommend the frequency of future advisory votes on the compensation of our named executive officers, you may:

vote CHOICE 1 (every one year);

vote CHOICE 2 (every two years);

vote CHOICE 3 (every three years); or

ABSTAIN from voting on the non-binding resolution.

The frequency choice that receives the highest numbers of votes cast will be considered to be the preferred frequency of our stockholders with which we are to hold future non-binding stockholder advisory say-on-pay votes on the compensation of our named executive officers. **Proposal 3 is a non-discretionary matter.** Therefore, if your shares are held by your bank, broker or other nominee in street name and you do not vote your shares, your bank, broker or other nominee cannot vote your shares on Proposal 3, and your non-vote will have no effect on the outcome of this proposal. If you vote to ABSTAIN on Proposal 3, your shares will not be voted FOR any of the frequency choices and will also not be counted as votes cast or shares voting on Proposal 3. As a result, voting to ABSTAIN will have no effect on the voting on Proposal 3.

As an advisory vote, this proposal is not binding. Our board of directors will take into consideration the outcome of this vote in determining the frequency of future non-binding advisory votes on the compensation of our named executive officers. However, because this vote is advisory and non-binding, our board of directors may decide that it is in our best interests and those of our stockholders to hold the advisory vote to approve the compensation of our named executive officers more or less frequently.

Proposal 4 Ratification of Selection of Independent Registered Public Accounting Firm

To approve Proposal 4, stockholders holding a majority of the votes cast on the matter must vote FOR the proposal. **Proposal 4 is considered a discretionary matter.** If your shares are held by your bank, broker or other nominee in

street name and you do not timely provide voting instructions with respect to your shares, your bank, broker or other nominee firm may vote your unvoted shares on Proposal 4. If you ABSTAIN from voting on Proposal 4, 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, voting to ABSTAIN will have no effect on the outcome of Proposal 4.

Although stockholder ratification of our audit committee's selection of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2019 is not required, we believe

Table of Contents

that it is advisable to give stockholders an opportunity to ratify this selection. If this proposal is not approved at the Annual Meeting, our audit committee will reconsider its selection of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2019.

Proposal 5 Approval of an Amendment to our Restated Certificate of Incorporation to Increase the Number of Authorized Shares of Common Stock

To approve Proposal 5, stockholders holding a majority of the shares of our common stock issued and outstanding and entitled to vote at the Annual Meeting must vote FOR the approval of the amendment to our restated certificate of incorporation to increase the number of authorized shares of common stock. **Proposal 5 is a discretionary matter.** Therefore, if your shares are held by your bank, broker or other nominee in street name and you do not vote your shares, your bank, broker 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 and will also not be counted as votes cast or shares voting on Proposal 5. Because Proposal 5 requires the affirmative vote of the holders of a majority of the shares of our common stock issued and outstanding and entitled to vote at the Annual Meeting, a vote to ABSTAIN will have the same effect as a vote AGAINST Proposal 5.

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

Our board of directors recommends that you vote:

FOR the election of each of the three nominees to serve as Class III directors on our board of directors for a three-year term to expire at the 2022 annual meeting of stockholders;

FOR the approval of the compensation of our named executive officers;

FOR a frequency of every one year for future advisory votes on the compensation of our named executive officers;

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

FOR the approval of an amendment to our restated certificate of incorporation to increase the number of authorized shares of common stock.

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

We do not know of any matters that may come before the Annual Meeting other than Proposals 1, 2, 3, 4 and 5. If any other matters are properly presented at the Annual Meeting, the persons named in the accompanying proxy intend to vote, or otherwise act, in accordance with their judgment on the matter.

Who is paying the costs of soliciting these proxies?

We will pay all of the costs of soliciting proxies. Our directors, officers, and other employees may solicit proxies in person or by mail, telephone, fax or email. We will pay our directors, officers, and other employees no additional compensation for these services. We do not currently plan to hire a proxy solicitor to help us solicit proxies, although we reserve the right to do so. We will ask banks, brokerage firms, and other nominees to forward these proxy materials to their principals and to obtain authority to execute proxies. We will then reimburse them for their expenses. Our costs for forwarding proxy materials will not be significant.

- 6 -

Table of Contents

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

If you would like a copy of our Annual Report on Form 10-K for the year ended December 31, 2018 that we filed with the Securities and Exchange Commission, or SEC, we will send you one without charge. Please write to:

Karyopharm Therapeutics Inc.

85 Wells Avenue

Newton, Massachusetts 02459

Attn: Investor Relations

All of our SEC filings are also available free of charge under the heading Financials & Filings SEC Filings in the Investors section of our website at www.karyopharm.com.

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

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

PROPOSAL 1:

ELECTION OF DIRECTORS

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

The term of office of our Class III directors, Garen G. Bohlin, Mikael Dolsten, M.D., Ph.D. and Michael G. Kauffman, M.D., Ph.D., will expire at the Annual Meeting. Accordingly, the nominees for Class III director for election at the Annual Meeting are Mr. Bohlin and Drs. Dolsten and Kauffman. If Mr. Bohlin and Drs. Dolsten and Kauffman are elected at the Annual Meeting, each such individual will be elected to serve for a three-year term that will expire at our 2022 annual meeting of stockholders and until such individual's successor is duly elected and qualified.

If no contrary indication is made, proxies are to be voted for Mr. Bohlin and Drs. Dolsten and Kauffman, or in the event that any of Mr. Bohlin and Drs. Dolsten and Kauffman is not a candidate or is unable to serve as a director at the time of the election (which is not currently expected), for any nominee who is designated by our board of directors to fill the vacancy.

Our board of directors currently consists of seven members. We have no formal policy regarding board diversity, but our Corporate Governance Guidelines provide that the background and qualifications of the members of our board of directors considered as a group should provide a significant breadth of experience, knowledge, and ability to assist our board of directors in fulfilling its responsibilities. Our priority in selection of board members is identification of

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

- 7 -

Table of Contents**Information Regarding Directors**

The information set forth below as to the directors and nominee for director has been furnished to us by the directors and nominee for director:

Nominee for Election to the Board of Directors**For a Three-Year Term Expiring at the****2022 Annual Meeting of Stockholders (Class III)**

| Name | Age | Present Position with Karyopharm Therapeutics Inc. |
|----------------------------------|------------|---|
| Garen G. Bohlin | 71 | Director |
| Mikael Dolsten, M.D., Ph.D. | 60 | Director |
| Michael G. Kauffman, M.D., Ph.D. | 55 | Chief Executive Officer and Director |

Garen G. Bohlin. Mr. Bohlin has served as a member of our board of directors since October 2013. Since April 2012, Mr. Bohlin has focused exclusively on service on boards of directors and consulting. From January 2010 until his retirement in April 2012, he served as Executive Vice President of Constellation Pharmaceuticals, Inc., a biopharmaceutical company, where he served as a part-time business partner with the Chief Executive Officer. Prior to Constellation Pharmaceuticals, Mr. Bohlin served as Chief Operating Officer of Sirtris Pharmaceuticals, Inc., a biotechnology company, from January 2006 to December 2009, where he played key roles in the overall management of Sirtris, its initial public offering and the sale of the company to GlaxoSmithKline. Mr. Bohlin was the founding Chief Executive Officer of Syntonix Pharmaceuticals, Inc., a biopharmaceutical company, from 1999 through December 2008, where he played a key role in the overall management of Syntonix, positioning it for an eventual sale to Biogen Idec. Prior to Syntonix, Mr. Bohlin was Executive Vice President of Genetics Institute, Inc., a biotechnology company, where he played a key role in overall management, its initial public offering and its sale to American Home Products/Wyeth, and a partner at Arthur Andersen & Co., a public accounting and consulting organization. Mr. Bohlin serves on the boards of directors and audit committees of Collegium Pharmaceutical, Inc., Tetrphase Pharmaceuticals, Inc. and Proteon Therapeutics, Inc., each a public biopharmaceutical company. He previously served as a director of several private and public biotechnology companies. Mr. Bohlin holds a B.S. in Accounting from the University of Illinois. We believe Mr. Bohlin's qualifications to serve on our board of directors include his extensive industry and board experience, including his audit committee experience, with publicly traded and privately held biotechnology companies.

Mikael Dolsten, M.D., Ph.D. Dr. Dolsten has served as a member of the board of directors since March 2015. Dr. Dolsten has served as President of Worldwide Research, Development and Medical and Executive Vice President of Pfizer Inc., which is one of the largest pharmaceutical companies in the world, since December 2010. Dr. Dolsten served as President of Worldwide Research and Development and Senior Vice President of Pfizer Inc. from May 2010 until December 2010 and President of Pfizer BioTherapeutics Research & Development Group and Senior Vice President of Pfizer Inc. from October 2009 until May 2010. From June 2008 to October 2009, Dr. Dolsten served as Senior Vice President of Wyeth, a biopharmaceutical company that was acquired by Pfizer Inc. in October 2009, and President, Wyeth Research from June 2008 to October 2009. Prior to joining Wyeth, Dr. Dolsten was a Private Equity Partner at Orbimed Advisors, LLC and Executive Vice President, Head of Pharma Research at Boehringer Ingelheim, a pharmaceutical company. Dr. Dolsten also previously held research leadership positions at AstraZeneca, Pharmacia and Upjohn. We believe Dr. Dolsten's qualifications to serve on our board of directors include his depth of experience

leading pharmaceutical research and development teams at large public companies. He is widely recognized as a leader within the medical research and drug development community and this level of expertise is significant to our board of directors as we continue to advance our clinical development pipeline and initiate additional clinical trials.

Michael G. Kauffman, M.D., Ph.D. Dr. Kauffman has served as Karyopharm's Chief Executive Officer since January 2011 and has been one of our directors since 2008. Dr. Kauffman co-founded Karyopharm with

Table of Contents

Dr. Sharon Shacham in 2008 and served as our President from January 2011 to December 2013 and as Chief Medical Officer from December 2012 to December 2013. Prior to joining Karyopharm, he was Chief Medical Officer of Onyx Pharmaceuticals Inc., a biopharmaceutical company, from November 2009 to December 2010. From November 2008 to November 2009, Dr. Kauffman was Chief Medical Officer of Proteolix Inc., which was acquired by Onyx Pharmaceuticals. At Proteolix, he led the development of Kyprolis® (carfilzomib), a novel proteasome inhibitor approved in refractory myeloma by the Food and Drug Administration in July 2012. Dr. Kauffman was an operating partner at Bessemer Venture Partners from 2006 to 2008, where he led investments in biotechnology companies. From 2006 to 2008, he was President and Chief Executive Officer of Epix Pharmaceuticals, Inc., a biopharmaceutical company that underwent liquidation proceedings through an assignment for the benefit of creditors under Massachusetts law in 2009. Dr. Kauffman was President and Chief Executive Officer of Predix Pharmaceuticals, Inc., a private biopharmaceutical company focused on G protein-coupled receptors (GPCR), from 2002 until its merger into Epix Pharmaceuticals in 2006. In that role, he led the merger of Predix Pharmaceuticals and Epix Pharmaceuticals, oversaw the discovery and development of four new clinical candidates and led collaboration transactions with Amgen and GlaxoSmithKline. From March 2000 to September 2002, Dr. Kauffman was Vice President, Clinical at Millennium Pharmaceuticals, Inc., a biopharmaceutical company, where he led the Velcade® development program. From September 1997 to March 2000, Dr. Kauffman held a number of senior positions at Millennium Predictive Medicine, Inc., a biopharmaceutical company and a subsidiary of Millennium Pharmaceuticals, where he led the discovery and development of novel molecular diagnostics for major cancers, including melanoma and led transactions with Becton-Dickenson and Bristol Myers Squibb. From August 1995 to September 1997, Dr. Kauffman held a number of senior positions at Biogen Idec, Inc., a biopharmaceutical company, where he led the clinical development of anti-CD40L antibodies in autoimmune and inflammatory diseases, and acted as the main medical advisor to the Biogen business development group. Dr. Kauffman currently serves on the board of directors, nominating and governance committee and research and development committee of Infinity Pharmaceuticals, Inc., a public biopharmaceutical company, on the board of directors and audit committee and as chairman of the compensation committee of Kezar Life Sciences, Inc., also a public biopharmaceutical company, and is the lead director and compensation committee member of Verastem Inc., also a public biopharmaceutical company. Dr. Kauffman previously served on the board of directors and compensation and audit committees of Zalicus Inc., a biotechnology company. Dr. Kauffman received his B.A. in Biochemistry from Amherst College and his M.D. and Ph.D. from Johns Hopkins Medical School, and he trained in internal medicine and rheumatology at Beth Israel Hospital (now Beth Israel Deaconess Medical Center) and Massachusetts General Hospital. He is board certified in internal medicine. We believe Dr. Kauffman's qualifications to serve on our board of directors include his extensive experience in the healthcare industry as well his extensive knowledge of our company and its business since inception through service in multiple executive leadership positions and as a member of our board.

Members of the Board of Directors Continuing in Office**Term Expiring at the****2020 Annual Meeting of Stockholders (Class I)**

| Name | Age | Present Position with Karyopharm Therapeutics Inc. |
|--------------------------|------------|---|
| J. Scott Garland | 50 | Director |
| Barry E. Greene | 55 | Director |
| Mansoor Raza Mirza, M.D. | 58 | Director and Clinical Consultant |

J. Scott Garland. Mr. Garland has served as a member of our board of directors since November 2014. Mr. Garland has been the President and Chief Executive Officer of Portola Pharmaceuticals, Inc., a biopharmaceutical company, since October 2018. Mr. Garland was the President of Relypsa Inc., a biopharmaceutical company, from April 2017 to October 2018, and was Senior Vice President and Chief

Table of Contents

Commercial Officer from October 2014 to April 2017. Prior to Relypsa, Mr. Garland served as Executive Vice President and Chief Commercial Officer of Exelixis, Inc., a biopharmaceutical company focused on developing and commercializing cancer treatments, from October 2011 to October 2014. Prior to joining Exelixis, from April 2002 to October 2011, Mr. Garland held positions at Genentech, Inc., most recently serving as Vice President of Genentech's Avastin® franchise, where he led the U.S. sales and marketing efforts for the drug. Prior to that position, he served as Vice President, Hematology Marketing and Sales, overseeing the Rituxan® franchise and as a Director on the Tarceva® franchise. From July 1997 to April 2002, Mr. Garland held several positions within the sales and marketing division of Amgen, Inc. and from July 1991 to July 1995, he served as a professional sales representative at Merck & Co., Inc. Mr. Garland has an M.B.A. from Duke University's Fuqua School of Business and a B.A. from California Polytechnic University (San Luis Obispo). We believe Mr. Garland's qualifications to serve on our board of directors include his more than 20 years of sales, marketing and commercialization experience in the pharmaceutical and biopharmaceutical industry as well as his extensive management experience at publicly-traded biopharmaceutical companies.

Barry E. Greene. Mr. Greene has served as a member of our board of directors since January 2013 and as our Lead Independent Director since January 2015. Mr. Greene has served as President of Alnylam Pharmaceuticals, Inc., a public biopharmaceutical company, since 2007, and served as its Chief Operating Officer from 2003 to 2016. Mr. Greene joined Alnylam in 2003, bringing over 15 years of experience in the healthcare industry and in consulting. Prior to Alnylam, he was General Manager of Oncology at Millennium Pharmaceuticals, Inc., a biopharmaceutical company, where he led the company's global strategy and execution for its oncology business, including strategic business direction and execution, culminating in the successful Food and Drug Administration approval and launch of VELCADE® (bortezomib) in mid-2003. Prior to joining Millennium in 2001, Mr. Greene served as Executive Vice President and Chief Business Officer for Mediconsult.com, a healthcare consulting company. Prior to Mediconsult.com, Mr. Greene's experience included serving as Vice President of Marketing and Customer Services for AstraZeneca (formerly AstraMerck), a biopharmaceutical company; Vice President, Strategic Integration with responsibility for the AstraZeneca North American post-merger integration; and a partner of Andersen Consulting, a consulting company, where he was responsible for the pharmaceutical/biotechnology marketing and sales practice. Mr. Greene currently is a member of the board of directors of Acorda Therapeutics, Inc., a public biopharmaceutical company, where he serves as a member of its compensation committee. Mr. Greene received his B.S. in Industrial Engineering from the University of Pittsburgh and served as a Senior Scholar at Duke University, Fuqua School of Business. We believe Mr. Greene's qualifications to serve on our board of directors and as our Lead Independent Director include his extensive experience in the healthcare and consulting industries as well his practical experience with business and product aspects of the biopharmaceutical industry, including guiding new drugs through research, development, and the commercialization process.

Mansoor Raza Mirza, M.D. Dr. Mirza has served as a member of our board of directors since October 2010. He has also served as a clinical consultant to us since 2010. Dr. Mirza is Chief Oncologist at the Department of Oncology, Rigshospitalet the Copenhagen University Hospital, Denmark and Medical Director of Nordic Society of Gynaecological Oncology (NSGO). Dr. Mirza is both a medical and radiation oncologist, with a primary focus in non-surgical treatment of gynecologic cancers. His key academic goals are to promote clinical research, international trial collaboration and education, and he has broad experience in clinical protocol development, trial conduct and clinical trial regulations. Dr. Mirza is the author of several phase 1, 2 and 3 studies, several of those leading to Food and Drug Administration and European Medicines Agency registration. He serves in several Independent Data Safety Monitoring Committees of international studies. He is an invited speaker at several international conferences, such as Meet the Professor at American Society of Clinical Oncology and Presidential Symposium at European Society for Medical Oncology. He is the senior author of national Danish guidelines for the management of endometrial, cervical, vulvar and non-epithelial ovarian cancers as well as of the NSGO radiotherapy guidelines for cervical and vulvar cancers. He is author of European Guidelines in endometrial and vulvar cancers. His other current appointments

include service as ESGO Council Member (European Society of Gynaecological Oncology), Executive Director of GCIG (Gynecologic Cancer InterGroup), Vice-Chairman of the Danish Gynecological Cancer Society, Founding Executive Member of the

- 10 -

Table of Contents

European Network of Gynecologic Oncology Trials Group, faculty member of the European Society of Medical Oncology and of the International Gynecologic Cancer Society. He also serves on the board of directors of Sera Prognostics, Inc., a private biopharmaceutical company. He has multiple publications in high-impact journals like the New England Journal of Medicine. He holds a M.D., Diploma in Surgery and Diploma in Clinical Oncology from the Pirogov Moscow State Medical Institute as well as post-graduate education and certification in radiation and medical oncology from the University of Southern Denmark. We believe Dr. Mirza's qualifications to serve on our board of directors include his position as an expert in the non-surgical treatment of cancer, and gynecologic cancers in particular, and his knowledge of our company and its business through service on our board since October 2010.

**Term Expiring at the
2021 Annual Meeting of Stockholders (Class II)**

| Name | Age | Present Position with Karyopharm Therapeutics Inc. |
|-------------|------------|---|
|-------------|------------|---|

| | | |
|-------------------------------|----|----------|
| Deepika R. Pakianathan, Ph.D. | 54 | Director |
|-------------------------------|----|----------|

Deepika R. Pakianathan, Ph.D. Dr. Pakianathan has served as a member of our board of directors since April 2013. Since 2001, Dr. Pakianathan has been a Managing Member at Delphi Ventures, a venture capital firm focused on biotechnology and medical device investments, and leads the firm's biotechnology investment activities. From 1998 to 2001, Dr. Pakianathan was a senior biotechnology banker at JPMorgan, a global investment bank, from 1997 to 1998, she was a Research analyst covering biotech at Genesis Merchant Group and from 1993 to 1997 she was a post-doctoral research scientist at Genentech. Dr. Pakianathan serves on the boards of directors of Alder Biopharmaceuticals, Inc., a public biopharmaceutical company, where she serves as a member of its compensation committee, OncoMed Pharmaceuticals, Inc., a public biopharmaceutical company, where she serves as a member of its audit and compensation committees and Calithera Biosciences, Inc., a public biopharmaceutical company, where she serves as the lead independent director and is a member of its compensation committee and chair of its nominating and governance committee. From 2004 to 2016, Dr. Pakianathan served on the board of directors of Alexza Pharmaceuticals, Inc., from 2009 to February 2013, Dr. Pakianathan served on the board of directors of PTC Therapeutics, Inc., and from 2007 to 2012, Dr. Pakianathan served on the board of directors of Relypsa, Inc., each a public biopharmaceutical company. Dr. Pakianathan received a B.Sc. from the University of Bombay, India, a M.Sc. from The Cancer Research Institute at the University of Bombay, India, and an M.S. and Ph.D. from Wake Forest University. We believe Dr. Pakianathan's qualifications to serve on our board of directors include her experience as a venture capital investor in, and director of, multiple biotechnology companies, as well as her experience as a biotechnology investment banker, research analyst and research scientist.

Recommendation of the Board of Directors

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE ELECTION OF EACH OF MR. GAREN G. BOHLIN, DR. MIKAEL DOLSTEN AND DR. MICHAEL G. KAUFFMAN AS A CLASS III DIRECTOR.

Table of Contents

CORPORATE GOVERNANCE

General

We believe that good corporate governance is important to ensure that Karyopharm Therapeutics Inc. is managed for the long-term benefit of our stockholders. This section describes key corporate governance practices that we have adopted. We have adopted a Code of Business Conduct and Ethics, which applies to all of our officers, directors and employees, Corporate Governance Guidelines, and charters for our audit committee, our compensation committee and our nominating and corporate governance committee. We have posted copies of our Code of Business Conduct and Ethics and Corporate Governance Guidelines, as well as each of our committee charters, on the Corporate Governance page of the Investors section of our website, www.karyopharm.com, which you can access free of charge. Information contained on the website is not incorporated by reference in, or considered part of, this proxy statement. We intend to disclose on our website any amendments to, or waivers from, our Code of Business Conduct and Ethics that are required to be disclosed by law or Nasdaq listing standards. We will also provide copies of these documents as well as our other corporate governance documents, free of charge, to any stockholder upon written request to Karyopharm Therapeutics Inc., 85 Wells Avenue, Newton, Massachusetts 02459, Attn: Investor Relations.

Director Independence

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

Under Rule 5605(a)(2) of the Nasdaq Listing Rules, a director will only qualify as an independent director if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 of the Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

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

Our board of directors has undertaken a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors has determined that each of our directors, with the exception of Drs. Kauffman and Mirza, is an independent director as defined under Rule 5605(a)(2) of the Nasdaq Listing Rules. Our board of directors also determined that Messrs. Bohlin and Garland and Dr. Pakianathan, who currently comprise our audit committee, Dr. Pakianathan and Mr. Greene, who comprise our compensation committee, and Messrs. Greene and Bohlin and Dr. Dolsten, who currently comprise our

nominating and corporate governance committee, satisfy the independence standards for such committees established by the SEC and the Nasdaq Listing Rules, as applicable.

- 12 -

Table of Contents

In addition, our board of directors also determined that Kenneth E. Weg, who served as a member of our board of directors from February 2013 until the annual meeting of stockholders on June 19, 2018 and served as a member of the nominating and corporate governance committee and compensation committee during 2018 from January 1, 2018 until June 19, 2018, and F. Carsten Thiel, Ph.D., who served as a member of our board of directors from August 31, 2018 until his resignation on November 27, 2018, and served as a member of the compensation committee from October 11, 2018 until November 27, 2018, satisfied the independence standards for such committees established by the SEC and the Nasdaq Listing Rules, as applicable. In making such determinations, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

There are no family relationships among any of our directors or executive officers, except that Dr. Kauffman, our Chief Executive Officer and a director, is married to Dr. Shacham, our President and Chief Scientific Officer.

Board Leadership Structure

Our bylaws and Corporate Governance Guidelines provide our board of directors with flexibility to combine or separate the positions of Chairman of the Board and Chief Executive Officer and/or to implement the role of Lead Independent Director in accordance with its determination that utilizing one or the other structure would be in the best interests of our company.

At this time, we do not have a Chairman of the Board, though our board of directors appointed Mr. Greene to serve as Lead Independent Director in January 2015. While our board of directors believes that oversight of our company is the responsibility of our board of directors as a whole, and this responsibility can be properly discharged without a Chairman or Lead Independent Director, our board of directors determined that appointing Mr. Greene as Lead Independent Director would facilitate interactions between Dr. Kauffman, our Chief Executive Officer, and the other independent directors and would enable the board of directors and the company to utilize Mr. Greene's breadth of experience across many strategic and operational matters in development stage biotechnology companies.

Mr. Greene serves as a liaison between our Chief Executive Officer and our independent directors. Mr. Greene meets regularly and communicates directly with the independent directors outside the presence of management and reports any comments and concerns of the independent directors to our Chief Executive Officer. He also meets regularly with our senior management to discuss operational and strategic matters. Mr. Greene presides over executive sessions of the board of directors and provides our Chief Executive Officer with an annual review, as well as regular feedback, based on the consensus views collected from members of our board of directors.

While Dr. Kauffman facilitates communications between members of our board of directors and works with management in the preparation of the agenda for each meeting of the board of directors, Mr. Greene also has an important role in establishing the agenda, determining what information is provided to our board of directors and coordinating with management to ensure that sufficient meeting time is allocated to each agenda item. Additionally, all of our directors are encouraged to make suggestions for agenda items or pre-meeting materials for meetings of our board of directors.

Our board of directors has concluded that the current leadership structure described above is appropriate at this time. However, our board of directors 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

Our board of directors has responsibility for the oversight of the company's risk management processes and, either as a whole or through its committees, regularly discusses with management our major risk exposures, the

Table of Contents

potential impact of these risks on our business and the steps we take to manage them. The risk oversight process includes receiving regular reports from board committees and members of senior management to enable our board of directors to understand the company's risk identification, risk management and risk mitigation strategies with respect to areas of potential material risk, including operations, finance, legal, regulatory, strategic and reputational risk.

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

Board of Directors Meetings

Our board of directors met seven times during the fiscal year ended December 31, 2018, or fiscal year 2018, including telephonic meetings. During that year, each of our incumbent directors attended or participated telephonically in 75% or more of the aggregate of (i) the total number of meetings of the board of directors held during the period for which he or she served as a director and (ii) the total number of meetings of all committees on which the director served during the periods that he or she served.

Committees of the Board of Directors

We have four standing committees: the audit committee, the compensation committee, the nominating and corporate governance committee and the compliance committee. Each of these committees has a written charter approved by our board of directors. A copy of each charter can be found under the heading "Corporate Governance" in the "Investors" section of our website at www.karyopharm.com.

Audit Committee

The members of our Audit Committee are Messrs. Bohlin and Garland and Dr. Pakianathan. Mr. Bohlin is the chair of the audit committee. Our board of directors has determined that Mr. Bohlin qualifies as an "audit committee financial expert" within the meaning of SEC regulations and the Nasdaq Listing Rules. In making this determination, our board has considered the formal education and nature and scope of Mr. Bohlin's previous experience, coupled with past and present service on various audit committees. Our audit committee assists our board of directors in its oversight of our accounting and financial reporting process and the audits of our financial statements. The audit committee met seven times during fiscal year 2018, including telephonic meetings. The audit committee's responsibilities include:

appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;

overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;

- 14 -

Table of Contents

reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;

recommending to our board whether the audited financial statements should be included in our annual report;

monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;

discussing our risk management policies;

overseeing our information technology strategy and matters related to the security and risks related to information technology systems;

establishing policies regarding hiring employees from the registered public accounting firm and procedures for the receipt, retention and treatment of accounting related complaints and concerns;

meeting independently with our 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.

Compensation Committee

The members of our compensation committee are Mr. Greene and Dr. Pakianathan. Dr. Pakianathan is the chair of the compensation committee. Our compensation committee assists our board of directors in the discharge of its responsibilities relating to the compensation of our executive officers. The compensation committee met six times during fiscal year 2018, including telephonic meetings. The compensation committee's responsibilities include:

reviewing and approving corporate goals and objectives relevant to the compensation of our chief executive officer;

reviewing and approving, or making recommendations to our board with respect to, the compensation of our chief executive officer and 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 non-employee director compensation;
and

reviewing and discussing with management our compensation disclosure required by SEC rules.

The compensation committee generally meets at least four times annually and with greater frequency if necessary. The agenda for each meeting is usually developed by the chair of the compensation committee, in consultation with our Chief Executive Officer and/or our General Counsel. The compensation committee meets regularly in executive session. However, from time to time, various members of management and other employees, as well as outside advisors or consultants, may be invited by the compensation committee to make presentations, to provide financial or other background information or advice, or to otherwise participate in compensation committee meetings. No officer may participate in, or be present during, any deliberations or determinations of the compensation committee regarding the compensation for such officer or any immediate family member of such officer. The charter of the compensation committee grants the compensation committee full access to all of our books, records, facilities, and personnel, as well as authority to obtain, at our expense, advice and assistance from internal and external legal, accounting, or other advisors and consultants, and other external resources that the compensation committee considers necessary or appropriate in the performance of its duties. In particular, the compensation committee has the sole authority to retain compensation consultants to

Table of Contents

assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms. In addition, under its charter, the compensation committee may form, and delegate authority to, subcommittees, consisting of independent directors, as it deems appropriate.

Historically, the compensation committee has approved significant adjustments to executives' annual compensation, determined variable cash compensation and equity awards, and established new performance objectives at one or more meetings held during the last quarter of the year. However, the compensation committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of our compensation strategy, potential modifications to that strategy, and new trends, plans, or approaches to compensation, at various meetings throughout the year. The compensation committee is responsible for making determinations, or making recommendations to our board of directors, regarding compensation of executive officers, making changes to pre-approved salary ranges, salary increase budgets, equity award budgets, variable cash compensation targets, incentive payments, and pre-approved equity ranges for new hires and high performers, and making material changes to benefits offered to our employees. In determining compensation of executive officers other than our Chief Executive Officer and President and Chief Scientific Officer, the compensation committee also considers the recommendations of our Chief Executive Officer and President and Chief Scientific Officer. In addition, the compensation committee, with input from its compensation consultant, makes recommendations to our board of directors regarding the compensation of non-employee directors. The compensation committee also administers our equity-based plans and determines whether to approve the maximum increases or smaller increases permitted to the number of shares reserved under our 2013 Stock Incentive Plan, or 2013 Plan, and 2013 Employee Stock Purchase Plan, or 2013 ESPP, that automatically occur each year pursuant to the evergreen provisions of such plans.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Messrs. Bohlin and Greene and Dr. Dolsten. Mr. Greene, who joined the nominating and corporate governance committee in June 2018, is the chair of the committee. The committee met four times during fiscal year 2018. The nominating and corporate governance committee's responsibilities include:

identifying individuals qualified to become board members;

recommending to our board of directors the persons to be nominated for election as directors and to each committee of our board of directors;

reviewing and making recommendations to our board of directors with respect to management succession planning;

developing and recommending to our board corporate governance principles; and

overseeing periodic evaluations of our board of directors.

Compliance Committee

Messrs. Garland and Greene and Dr. Dolsten serve as members of our compliance committee as does Dr. Mirza, who joined the compliance committee in February 2019. Mr. Garland is the chair of the compliance committee. The committee met three times during fiscal year 2018. The compliance committee's responsibilities include:

overseeing implementation of and monitoring the company's non-financial compliance program, including policies, standards, procedures, systems and initiatives, with a focus on quality, regulatory and commercial compliance matters;

evaluating, monitoring and discussing with senior management the adequacy and effectiveness of the company's non-financial compliance program and compliance assurance systems and initiatives and considering recommendations for improvement thereof; and

Table of Contents

making findings and recommendations to the Board regarding the adequacy of the company's non-financial compliance program.

Compensation Committee Interlocks and Insider Participation

During 2018, Drs. Pakianathan and Thiel and Messrs. Greene and Weg served as members of our compensation committee. 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, whose executive officers served as a member of our board of directors or our compensation committee during 2018. During 2018, no member of our compensation committee was a current or former officer or employee of Karyopharm or had any related person transaction involving Karyopharm.

Code of Business Conduct and Ethics

We have adopted a written Code of Business Conduct and Ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted on our website, www.karyopharm.com, a current copy of the Code of Business Conduct and Ethics and all disclosures that are required by law or Nasdaq listing standards concerning any amendments to, or waivers from, any provision of the Code of Business Conduct and Ethics. Information contained on the website is not incorporated by reference in, or considered part of, this proxy statement.

Director Nomination Process

Director Qualifications

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

reputation for personal and professional integrity, honesty and adherence to high ethical standards;

demonstrated business acumen, experience and ability to exercise sound judgments in matters that relate to the current and long-term objectives of our company;

strong finance experience;

commitment to understand our company and its industry;

interest and ability to understand the sometimes conflicting interests of the various constituencies of our company, which include stockholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all stockholders;

diversity of expertise and experience in substantive matters pertaining to our business relative to other board members;

diversity of background and perspective, including with respect to age, gender, race, place of residence and specialized experience; and

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

Table of Contents

The nominating and corporate governance committee has not adopted a formal policy with respect to a fixed set of specific minimum qualifications for its candidates for membership on the board of directors. The committee considers such factors, including those set forth above, as it may deem are in the best interests of our company and its stockholders. The committee further believes it is appropriate for at least one member of our board of directors to meet the criteria for an audit committee financial expert as that phrase is defined under the regulations promulgated by the SEC, and that a majority of the members of our board of directors be independent as required under the Nasdaq qualification standards. The committee believes it is appropriate for our Chief Executive Officer to serve as a member of our board of directors. Our directors' performance and qualification criteria are reviewed periodically by the nominating and corporate governance committee.

Identification and Evaluation of Nominees for Directors

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

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

We have not received director candidate recommendations from our stockholders and do not have a formal policy regarding consideration of such recommendations. However, any recommendations received from stockholders will be evaluated in the same manner that potential nominees suggested by board members, management, or other parties are evaluated. We do not intend to treat stockholder recommendations in any manner different from other recommendations.

Stockholders wishing to recommend a director candidate for consideration by our nominating and corporate governance committee must write to our Corporate Secretary. Recommendation of director candidates must be received by our Corporate Secretary at our principal executive offices. Such submissions must state the nominee's name, together with appropriate biographical information and background materials, and information with respect to the stockholder or group of stockholders making the recommendation, including the number of shares of common stock owned by such stockholder or group of stockholders. We may require any proposed nominee to furnish such

other information as we may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such proposed nominee.

- 18 -

Table of Contents

Stockholders also have the right under our bylaws to directly nominate director candidates, without any action or recommendation on the part of the nominating and corporate governance committee or the board of directors, by following the procedures set forth under Stockholder Proposals. If our board of directors determines to nominate a stockholder-recommended candidate and recommends his or her election, then his or her name will be included in our proxy statement and proxy card for the next annual meeting of stockholders. Otherwise, candidates nominated by stockholders in accordance with the procedures set forth in the bylaws will not be included in our proxy statement and proxy card for the next annual meeting.

Director Attendance at Annual Meetings

We do not have a formal policy regarding attendance by members of our board of directors at our annual meeting of stockholders. Three members of our board of directors serving at the time attended our 2018 annual meeting of stockholders held on June 19, 2018 in person or by teleconference.

Communications with Our Board of Directors

Stockholders seeking to communicate with our board of directors must submit their written comments to our Corporate Secretary, Karyopharm Therapeutics Inc., 85 Wells Avenue, Newton, Massachusetts 02459. The Corporate Secretary will forward such communications to each member of our board of directors; provided that, if in the opinion of our Corporate Secretary it would be inappropriate to send a particular stockholder communication to a specific director, such communication will only be sent to the remaining directors (subject to the remaining directors concurring with such opinion).

Director Compensation

We compensate non-employee members of our board of directors for their service using a combination of cash and equity compensation. Directors who are also employees do not receive any compensation for service on the board of directors in addition to compensation payable for their service as our employees. The non-employee members of our board of directors are also reimbursed for travel, lodging, and other reasonable expenses incurred in attending board of directors or committee meetings.

During 2018, we compensated our non-employee directors based on the following compensation guidelines established by our board of directors, upon the recommendation of our compensation committee:

| Compensation Type | Amount |
|---|---------------|
| Annual Cash Retainers | |
| Board of Directors: | |
| All non-employee directors | \$ 38,000 |
| Additional retainer Lead Independent Director or independent Chairman | \$ 35,000 |
| Audit Committee: | |
| Chair | \$ 20,000 |
| Non-chair members | \$ 10,000 |
| Compensation Committee: | |
| Chair | \$ 15,000 |
| Non-chair members | \$ 6,000 |
| Nominating and Corporate Governance Committee: | |

| | | |
|--------------------------------------|----|---------------|
| Chair | \$ | 10,000 |
| Non-chair members | \$ | 5,000 |
| Compliance Committee: | | |
| Chair | \$ | 17,000 |
| Non-chair members | \$ | 8,000 |
| Initial Stock Option Award(1) | | 34,000 shares |
| Annual Stock Option Award(2) | | 17,000 shares |

Table of Contents

- (1) This is a one-time option award granted upon initial election to our board of directors. The option vests with respect to one-third of the shares on the first anniversary of the grant date and with respect to an additional 1/36th of the shares at the end of each successive month following the first anniversary of the grant date until the third anniversary of the grant date, subject to the director's continued service.
- (2) This option award is granted after each annual meeting of our stockholders and vests in full on the first anniversary of the grant date, subject to the director's continued service.

The stock options granted to our non-employee directors for service on our board of directors or its committees have an exercise price equal to the fair market value of our common stock on the date of grant, expire ten years after the date of grant, and are subject to the director's continued service on our board of directors.

To the extent that a non-employee director has other responsibilities to our company in addition to service on our board of directors, such director may receive additional compensation to the extent as deemed appropriate by our board of directors.

In February 2019, our board of directors, upon the recommendation of our compensation committee, revised the compensation guidelines for non-employee directors, to become effective upon the adjournment of the Annual Meeting. The changes to the compensation guidelines are as follows:

each non-employee director will receive a cash retainer of \$40,000 per year;

each non-chair member of the compensation committee will receive a cash retainer of \$7,500 per year for service on the committee;

for the annual stock option award, which is awarded after each annual meeting of stockholders, each non-employee director will receive an option to purchase 25,000 shares; and

for any initial stock option awards, a new non-employee director joining our board of directors will receive an option to purchase 50,000 shares.

All other elements of the compensation guidelines for non-employee directors remain unchanged.

Dr. Mirza serves as a clinical consultant to us pursuant to a consulting agreement with an entity wholly-owned by Dr. Mirza, for which he was paid (through such entity) a consulting fee of \$114,000 for 2018. See "Certain Relationships and Related Person Transactions - Consulting Arrangements."

The following table sets forth information concerning the compensation for our non-employee directors during the fiscal year ended December 31, 2018.

Table of Contents**2018 Director Compensation**

| Name(1) | Fees Earned or Paid | | | Total (\$) |
|-----------------------------------|---------------------------|---------------------------|-----------------------------------|---------------|
| | In Cash \$(2) | Option Awards \$(3) | All Other Compensation (\$) | |
| Garen G. Bohlin(4) | 63,000 | 215,592 | | 278,592 |
| Mikael Dolsten, M.D.(5) | 51,000 | 215,592 | | 266,592 |
| J. Scott Garland(6) | 65,000 | 215,592 | | 280,592 |
| Barry E. Greene(7) | 96,531 | 215,592 | | 312,123 |
| Mansoor Raza Mirza, M.D.(8) | 38,000 | 215,592 | 114,000(9) | 367,592 |
| Deepika R. Pakianathan, Ph.D.(10) | 58,775 | 215,592 | | 274,367 |
| F. Carsten Thiel, Ph.D.(11) | 9,973 | 499,508 | | 509,481 |
| Kenneth E. Weg(12) | 25,350 | | | 25,350 |

- (1) Dr. Kauffman, one of our directors who also serves as our Chief Executive Officer, does not receive any compensation for his service as a director.
- (2) Amounts represent cash compensation for services rendered by each member of our board of directors for their services on our board of directors or a committee thereof.
- (3) Amounts listed represent the aggregate fair value amount computed as of the grant date of the option awards granted during 2018 in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718. Assumptions used in the calculation of these amounts are included in Note 9, Stock-based Compensation, to our consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018. Each non-employee director other than Mr. Weg and Dr. Thiel was awarded a stock option to purchase 17,000 shares on June 19, 2018, the date of our annual meeting of stockholders. Dr. Thiel was awarded a stock option to purchase 34,000 shares upon his election to the board of directors on August 31, 2018.
- (4) As of December 31, 2018, Mr. Bohlin held options to purchase 74,606 shares of our common stock.
- (5) As of December 31, 2018, Dr. Dolsten held options to purchase 74,000 shares of our common stock.
- (6) As of December 31, 2018, Mr. Garland held options to purchase 74,000 shares of our common stock.
- (7) As of December 31, 2018, Mr. Greene held options to purchase 77,636 shares of our common stock.
- (8) As of December 31, 2018, Dr. Mirza held options to purchase 101,463 shares of our common stock, of which 12,121 were held by Mirza Consulting, an entity wholly-owned by Dr. Mirza.
- (9) Amount listed represents \$114,000 paid to Mirza Consulting, an entity wholly-owned by Dr. Mirza, for consulting and advisory services provided to us by Dr. Mirza during 2018.
- (10) As of December 31, 2018, Dr. Pakianathan held options to purchase 84,000 shares of our common stock.
- (11) Dr. Thiel resigned from the board of directors effective November 27, 2018.
- (12) Mr. Weg served as a member of the board of directors until the annual meeting of stockholders on June 19, 2018.

Limitation of Liability and Indemnification

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

for any breach of the director's duty of loyalty to us or our stockholders;

for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

- 21 -

Table of Contents

for voting or assenting to unlawful payments of dividends, stock repurchases, or other distributions; or

for any transaction from which the director derived an improper personal benefit.

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

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

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

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

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

Table of Contents

Report of the Audit Committee of the Board of Directors

The audit committee oversees the company's financial reporting process on behalf of the board of directors. We have reviewed the company's audited consolidated financial statements for the fiscal year ended December 31, 2018 and discussed them with Company management and Ernst & Young LLP, the company's independent registered public accounting firm for the fiscal year ended December 31, 2018.

We have received from, and discussed with, Ernst & Young LLP, which is responsible for expressing an opinion on the conformity of the company's audited consolidated financial statements with accounting principles generally accepted in the United States, its judgments as to the quality, not just the acceptability, of the company's accounting principles and such other matters as are required to be discussed with the audit committee under generally accepted auditing standards, including the matters to be discussed as required by AS 1301: Communications with Audit Committees, as adopted by the Public Company Accounting Oversight Board (the "PCAOB") and all other communications required under the standards of the PCAOB. In addition, we have discussed with Ernst & Young LLP its independence from management and the company, have received from Ernst & Young LLP the written disclosures and the letter required by applicable requirements of the PCAOB regarding its communications with us concerning independence, and have considered the compatibility of non-audit services with the auditors' independence.

Based on the review and discussions referred to above, we recommended to the board of directors that the audited consolidated financial statements be included in the company's Annual Report on Form 10-K for the year ended December 31, 2018.

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

The foregoing report has been furnished by the audit committee.

Respectfully submitted,

The Audit Committee of the Board of Directors

Garen G. Bohlin (chair)

J. Scott Garland

Deepika R. Pakianathan

Table of Contents

INFORMATION ABOUT EXECUTIVE OFFICER COMPENSATION

Compensation Discussion and Analysis

Our compensation committee is responsible for overseeing the total compensation of our senior management team, which is comprised of our executive officers and certain other senior managers. In this capacity, our compensation committee designs, implements, reviews and approves all compensation for named executive officers (NEOs), except that in the case of Michael G. Kauffman, M.D., Ph.D., our Chief Executive Officer, and Sharon Shacham, Ph.D., M.B.A., our President and Chief Scientific Officer, our compensation committee designs, implements, reviews and recommends, and the board of directors reviews and approves, all compensation for Drs. Kauffman and Shacham. This Compensation Discussion and Analysis describes the principles underlying our policies and decisions with respect to the compensation of our NEOs who are named in the Summary Compensation Table below, and all material factors relevant to an analysis of these policies and decisions. Our NEOs for the year ended December 31, 2018 are:

Michael G. Kauffman, M.D., Ph.D., our Chief Executive Officer;

Sharon Shacham, Ph.D., M.B.A., our President and Chief Scientific Officer;

Christopher B. Primiano, J.D., M.B.A., our Executive Vice President, Chief Business Officer, General Counsel and Secretary;

Anand Varadan, M.B.A., our Executive Vice President, Chief Commercial Officer; and

Michael Falvey, M.S.M., our former Executive Vice President, Chief Financial Officer and Treasurer. Securities and Exchange Commission (SEC) rules require that we discuss the compensation of all individuals serving in the role of principal financial officer during the year. As a result, Mr. Falvey, who served as our Executive Vice President, Chief Financial Officer and Treasurer through January 18, 2019, is discussed in that capacity. Following Mr. Falvey's transition out of his role as Executive Vice President, Chief Financial Officer and Treasurer effective January 18, 2019, he remains engaged by the company as a consultant. For additional information see *Separation Arrangements with Michael Falvey*.

Executive Summary

Our compensation committee seeks to ensure that our compensation programs are aligned with the interests of our stockholders and our business goals and that the total compensation paid to each of our NEOs is fair, reasonable and competitive. Key elements of our 2018 compensation programs included:

| Compensation Element | Purpose | Features |
|-----------------------------|---|--|
| Base salary | To attract, retain and reward talented executives needed to drive our business. | Fixed component of compensation to provide financial stability, based on |

| | | |
|-------------------------------|--|---|
| Annual cash incentive program | To promote and reward the achievement of key short-term objectives and align executive and stockholder interests. | responsibilities, experience, internal equity, performance and peer company data. Variable component of compensation tied to the achievement of pre-determined quantitative and qualitative corporate performance goals. |
| Equity incentive compensation | To encourage executives to deliver long-term company performance, align executive and stockholder interests and promote retention. | Variable component of compensation in the form of stock options typically subject to multi-year vesting based on continued service and tied to the performance of our common stock price. |

Table of Contents

Executive Compensation Program Best Practices

Our compensation committee believes that a strong foundation for our compensation program is necessary to execute our executive compensation philosophy effectively. The following best practices serve as the foundation for our executive compensation program:

What We Do:

Use a mix of short- and long-term incentive compensation, with an emphasis on long-term compensation.

Use a mix of fixed and variable compensation, with an emphasis on variable, at-risk performance-based compensation.

Compare against peer companies.

Require a double-trigger (both a change in control and termination without cause or for good reason) for cash payments and accelerated vesting of equity awards.

Engage independent consultants to advise our compensation committee on topics related to board and executive compensation.

Assess risk of incentive compensation policies and programs.

What We Don't Do:

- × Do not offer our executive team any substantially enhanced benefits or perquisites when compared to our employee population.
- × Do not provide our executive officers with guaranteed annual salary increases or annual or multi-year guaranteed bonuses.
- × Do not provide income tax gross-ups.
- × Do not provide any excise tax gross-ups on severance or other payments in the event of a change in control.
- × Do not permit repricing of underwater stock options without stockholder approval.
- × Do not permit hedging transactions with our securities and we restrict pledging of our securities.

Select Business Highlights for 2018

We are a clinical-stage pharmaceutical company focused on the discovery, development and subsequent commercialization of novel, first-in-class drugs directed against nuclear transport and related targets for the treatment of cancer and other major diseases. Our scientific expertise is focused on understanding the regulation of intracellular communication between the nucleus and the cytoplasm. We have discovered and are developing wholly-owned, novel, small molecule Selective Inhibitor of Nuclear Export (SINE) compounds that inhibit the nuclear export protein exportin 1 (XPO1). These SINE compounds represent a new class of drug candidates with a novel mechanism of action that have the potential to treat a variety of diseases in areas of unmet medical need.

During 2018, we achieved a number of milestones and made significant progress on our clinical development and business goals. Our clinical development achievements for 2018 include announcing positive topline results from our Phase 2b STORM study and Phase 2b SADAL study, completing the enrollment in our Phase 3 BOSTON study and completing the rolling submission of a new drug application (NDA) to the U.S. Food and Drug Administration (FDA) with a request for accelerated approval for selinexor as a new treatment for patients based on the results of the STORM study. In addition, we also achieved goals relating to business development, financial performance and employee retention.

Compensation Philosophy and Core Objectives

The objective of our executive compensation program is to align management interests with the drivers of value creation for our stockholders and support achievement of our strategic goals and objectives. We are committed to our compensation philosophy which incorporates the following principles:

Offer competitive compensation. We seek to provide competitive compensation opportunities to attract, retain and motivate executive talent.

Reward performance. Promote the achievement of key strategic and financial performance measures by linking short- and long-term cash and equity incentives to the achievement of measurable corporate performance goals.

- 25 -

Table of Contents

Link the interests of our executives with those of our stockholders. Align executive incentives with the creation of value for our stockholders.

Determining and Setting Executive Compensation

We develop our compensation programs after reviewing publicly-available compensation data and subscription survey data for our peer group, provided by an independent compensation consulting firm engaged by our compensation committee. For setting 2018 compensation, our compensation committee engaged Arnosti Consulting, Inc. (Arnosti) as its independent compensation consultant, to advise on executive compensation matters including: overall compensation program design, peer group development and updates, and benchmarking executive officer and director compensation programs. Our compensation committee assessed the independence of Arnosti consistent with Nasdaq listing standards and concluded that the engagement of Arnosti did not raise any conflict of interest. The company paid the cost for Arnosti's services; however, the compensation committee retained the sole authority to direct, terminate, or engage Arnosti's services and Arnosti reported directly to the compensation committee. In addition to the services provided to the compensation committee, Arnosti provided advice to management with respect to compensation for employees at or above the Vice President level and information to management with respect to planning for the 2019 equity incentive compensation program. The decision to use Arnosti for advice regarding compensation for employees at or above the level of Vice President was made by management and approved by the compensation committee. Compensation for all services provided to the company by Arnosti did not exceed \$120,000 during 2018.

In October 2018, Compensia, Inc. (Compensia) was appointed by the compensation committee as a compensation advisor to the compensation committee. Our compensation committee assessed the independence of Compensia consistent with Nasdaq listing standards and concluded that the engagement of Compensia did not raise any conflict of interest. We pay the cost for Compensia's services; however, the compensation committee retains the sole authority to direct, terminate, or engage Compensia's services and Compensia reports directly to the compensation committee. Compensia performed no other work for the company. Compensation for all services provided to the company by Compensia did not exceed \$120,000 during 2018.

Defining and Comparing Compensation to Market Benchmarks

In evaluating the total compensation of our named executive officers, our compensation committee, using information provided by Arnosti, established a peer group of publicly-traded companies in the biopharmaceutical and biotechnology industries that was selected based on a balance of the following criteria:

Peer Group Selection Criteria

| | |
|---------------------------------|---|
| Organizational Structure | Ø Companies whose number of employees, stage of development and market capitalization are similar, though not necessarily identical, to ours. |
| Executive Positions | Ø Companies with similar executive positions to ours. |
| Executive Talent Pool | Ø Companies against which we believe we compete for executive talent. |
| Operations in U.S. | Ø Public companies based in the United States whose compensation and financial data are available in proxy statements or through widely available compensation surveys. |

Table of Contents

Based on these criteria, our peer group for 2018, referred to as our 2018 peer group, as approved by our compensation committee, was comprised of the 25 companies listed below.

2018 Peer Group

| | | |
|--------------------------------|---------------------------------|----------------------------------|
| Accelaron Pharma Inc. | Celldex Therapeutics, Inc. | PTC Therapeutics, Inc. |
| Aduro Biotech, Inc. | ChemoCentryx, Inc. | Sangamo Therapeutics, Inc. |
| Aerie Pharmaceuticals Inc. | Enanta Pharmaceuticals, Inc. | Seres Therapeutics, Inc. |
| Aimmune Therapeutics, Inc. | Epizyme, Inc. | Syndax Pharmaceuticals, Inc. |
| Akebia Therapeutics, Inc. | Geron Corporation | Syros Pharmaceuticals, Inc. |
| Array Biopharma Inc. | Global Blood Therapeutics, Inc. | Tetraphase Pharmaceuticals, Inc. |
| Atara Biotherapeutics, Inc. | Insmed Incorporated | Ziopharm Oncology, Inc. |
| Biocryst Pharmaceuticals, Inc. | Keryx Biopharmaceuticals, Inc. | |
| Calithera Biosciences Inc. | Macrogenics, Inc. | |

We believe that the compensation practices of our 2018 peer group provided us with appropriate compensation benchmarks for evaluating the compensation of our named executive officers during 2018. Notwithstanding the similarities of the 2018 peer group to our company, due to the nature of our business, we compete for executive talent with many public companies that are larger and more established than we are or that possess greater resources than we do, and with smaller private companies that may be able to offer greater equity compensation potential. Accordingly, in 2018, our compensation committee generally targeted compensation for our executive officers (other than Drs. Kauffman and Shacham) as follows:

base salaries at approximately the 50th percentile of the salaries in our 2018 peer group;

annual performance-based cash incentive award opportunities at approximately the 60th percentile of our 2018 peer group; and

annual equity incentive awards for such executive officers (on a combined basis) at the 65th percentile of our 2018 peer group, provided in the form of stock options.

In determining the annual equity incentive awards for each executive officer (other than Drs. Kauffman and Shacham) in 2018, the equity incentive compensation was targeted at the 65th percentile of equity compensation awarded to similarly situated executives of the companies in our 2018 peer group. The target amounts for each of those executive officers were then aggregated (subject to adjustment) and our compensation committee allocated such aggregate amount among the executive officers (other than Drs. Kauffman and Shacham) based a number of criteria, including the executive officer's performance against established company goals, long-term expected individual contributions and any promotions.

Because Drs. Kauffman and Shacham are married, their aggregate compensation is considered. In 2018, our compensation committee generally targeted compensation for Drs. Kauffman and Shacham as follows:

base salaries at approximately the 35th and 80th percentiles, respectively, of the salaries in our 2018 peer group;

annual performance-based cash incentive award opportunities at approximately the 60th and 80th percentiles, respectively, of our 2018 peer group; and

annual equity incentive awards for Drs. Kauffman and Shacham (on a combined basis) at the 65th percentile of our 2018 peer group, provided in the form of stock options.

In determining the annual equity incentive awards for each of Drs. Kauffman and Shacham in 2018, the equity incentive compensation was targeted at the 65th percentile of equity compensation awarded to similarly situated executives of the companies in our 2018 peer group. The target amounts for Drs. Kauffman and Shacham were then aggregated (subject to adjustment) and the board of directors (based on the recommendation of the compensation committee) allocated 50% of such aggregate amount to each of Drs. Kauffman and Shacham.

Table of Contents

In addition, our compensation committee may consider other criteria, including market factors, the experience level of the executive and the executive's performance against established company goals, in determining variations to the general target ranges.

Other Key Performance Factors in Determining Executive Compensation

As the biopharmaceutical industry is characterized by a long product development cycle, including a lengthy research and development period and a rigorous approval phase involving clinical studies that must precede any governmental regulatory approval, many of the traditional benchmarking metrics, such as product sales, revenues and profits are inappropriate for a development-stage biopharmaceutical company such as us. Instead, the specific performance factors our compensation committee considers when determining the compensation of our named executive officers include:

key research and development achievements, including advances in our novel, small molecule SINE compounds that inhibit XPO1 in cancer indications;

initiation and progress of clinical studies for our product candidates;

achievement of regulatory milestones;

establishment and maintenance of key strategic relationships and business initiatives, including financings; and

development of organizational capabilities and managing our growth.

These performance factors were considered by our compensation committee in determining awards for our executives under our annual performance-based cash incentive and equity incentive programs.

Annual Compensation Review Process

Throughout each calendar year, the board of directors and the compensation committee discuss each executive officer's performance with input from our Chief Executive Officer and President and Chief Scientific Officer. This process leads to a recommendation by our Chief Executive Officer and President and Chief Scientific Officer, at the end of each calendar year, to our compensation committee with respect to each executive officer other than themselves as to:

the need for salary increases;

the amount of payments to be paid under the annual performance-based cash incentive program; and

the amount of equity incentive compensation that should be awarded.

These recommendations are considered by our compensation committee when they make determinations on all such matters.

Components of Executive Compensation

The primary elements of our executive compensation program are:

base salaries;

annual performance-based cash incentive awards;

equity incentive awards;

health and welfare benefits and other employee benefits; and

severance and change in control benefits.

Table of Contents

The value of our variable, performance-based compensation is allocated between short-term compensation in the form of a cash bonus and long-term compensation in the form of stock option awards that vest over time from the date of grant of the option awards. The annual cash bonus is intended to provide an incentive to our executives to achieve short-term operational objectives. The stock option award is intended to provide an incentive for our executives to achieve longer-term strategic business goals, which should lead to higher stock prices and increased stockholder value. We have not had any formal or informal policy or target for allocating compensation 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 industry information and our cash and equity resources, determines subjectively what it believes to be the appropriate level and mix of the various compensation components.

We do not have any defined benefit pension plans or any non-qualified deferred compensation plans.

We are party to employment agreements with each of our named executive officers. Employment agreements with our named executive officers are described below under the caption *Executive Compensation Employment Agreements, Severance and Change in Control Arrangements*.

Base Salaries

We provide base salaries to our named executive officers to compensate them with a fair and competitive base level of compensation for services rendered during the year. Base salaries for our NEOs typically are established through arm's-length negotiation at the time the executive is hired, taking into account responsibilities, experience, internal equity and peer company data. On an annual basis, our compensation committee reviews and evaluates, with input from our Chief Executive Officer and President and Chief Scientific Officer, for executives other than themselves, the need for adjustment of the base salaries of our NEOs based on changes and expected changes in the scope of an NEO's responsibilities.

The compensation committee also considers promotions, the individual contributions made by, and performance of, the executive during the prior year, the executive's performance over a period of years, overall labor market conditions, the relative ease or difficulty of replacing the executive with a well-qualified person, our overall growth and development as a company, general salary trends in our industry and among our peer group and where the executive's salary falls in the salary range presented by that data. We do not provide for any formulaic base salary increases for our NEOs and none of our executive officers is currently party to an employment agreement that provides for automatic or scheduled increases in base salary. Our compensation committee believes our base salaries for our executives (other than Drs. Kauffman and Shacham) should be targeted at the 50th percentiles of the salaries in the peer group and base salaries for Drs. Kauffman and Shacham should be targeted at the 35th and 80th percentiles, respectively, of the salaries in the peer group.

Merit-based increases in base salary for all of our executive officers (other than Drs. Kauffman and Shacham) are determined by our compensation committee and merit-based increases in base salary for Drs. Kauffman and Shacham are determined by our board of directors based on the recommendation of our compensation committee.

As part of our 2017 annual compensation review, the compensation committee approved (and, in the case of Drs. Kauffman and Shacham, the compensation committee recommended, and the board of directors approved) annual base salaries for our executive officers for 2018 (other than for Mr. Varadan). In determining and recommending these annual base salaries, the compensation committee reviewed the market compensation data presented by Arnosti and considered each executive officer's performance. The table below sets forth the

Table of Contents

adjustments to base salary, in dollars and as a percentage, for each of our named executive officers serving at the beginning of 2018:

| Executive | 2017 | 2018 | % Increase |
|------------------|--------------------|--------------------|-------------------|
| | Base Salary | Base Salary | |
| Dr. Kauffman | \$ 530,500 | \$ 550,000 | 3.7% |
| Dr. Shacham | \$ 435,000 | \$ 450,000 | 3.4% |
| Mr. Primiano | \$ 390,000 | \$ 404,000 | 3.6% |
| Mr. Falvey(1) | \$ 400,000 | \$ 404,000 | 1.0% |

(1) Mr. Falvey commenced employment with us in September 2017, and the 2017 base salary shown is the annualized amount.

Our board of directors appointed Mr. Varadan as our Executive Vice President, Chief Commercial Officer effective June 22, 2018. In connection with his appointment, our compensation committee approved his compensation arrangements pursuant to his offer letter, including an annual base salary of \$405,000. In setting Mr. Varadan's compensation, our compensation committee considered compensation benchmark data relative to the 2018 peer group, internal pay equity relative to our other executives and Mr. Varadan's experience. For a discussion of the terms of Mr. Varadan's offer letter see *Offer Letter for Anand Varadan*.

Annual Performance-Based Cash Incentives

Our compensation committee aims to determine an appropriate mix of cash payments and equity incentive awards to meet short- and long-term goals and objectives. In February 2018, our compensation committee approved the annual performance-based cash incentive program for 2018, including the opportunity for eligible participants to achieve incentive awards above established bonus targets based on the company's performance against 2018 corporate goals.

The table below shows the target award under the annual performance-based cash incentive program as a percentage of each named executive officer's annual base salary in 2018, the maximum cash award opportunity in dollars for 2018 and the actual cash bonus payments to our named executive officers for 2018 performance, which were paid in February 2019, as well as the actual bonus payment as a percentage of the target award opportunity. The details regarding the determination of these cash bonus awards are discussed below.

2018 Annual Performance-Based Cash Incentive Program

| | Annualized Base Salary (\$) | 2018 Target Award (% of Base Salary) | 2018 Maximum Award Opportunity (\$) | 2018 Actual Bonus Payment (\$) | 2018 Actual Bonus Payment (% of Target Award Opportunity) |
|-----------------|--|---|--|---|--|
| Dr. Kauffman(1) | \$ 550,000 | 60% | \$ 449,625 | \$ 268,625 | 81% |
| Dr. Shacham(1) | \$ 450,000 | 50% | \$ 306,563 | \$ 183,063 | 81% |

Edgar Filing: Karyopharm Therapeutics Inc. - Form DEF 14A

| | | | | | |
|----------------|------------|-----|------------|------------|------|
| Mr. Primiano | \$ 404,000 | 40% | \$ 220,180 | \$ 204,020 | 126% |
| Mr. Varadan(2) | \$ 405,000 | 40% | \$ 110,363 | \$ 102,063 | 126% |
| Mr. Falvey(3) | \$ 404,000 | 40% | \$ 220,180 | \$ 173,417 | 107% |

- (1) Actual bonuses approved for 2018 reflect reduced amounts, at the request of Drs. Kauffman and Shacham, of \$148,000 and \$101,000, respectively, to offset a portion of the cash bonuses paid in August 2018 to certain other employees of the company for their contributions to the company's submission of its first NDA to the FDA.
- (2) Mr. Varadan commenced employment with the company on June 22, 2018, and, as result, his maximum award opportunity and actual bonus for 2018 were prorated.
- (3) Mr. Falvey transitioned out of his role as Executive Vice President, Chief Financial Officer and Treasurer effective January 18, 2019. Pursuant to the terms of his Separation Agreement approved by our

- 30 -

Table of Contents

compensation committee, Mr. Falvey received a payment of an annual performance-based cash incentive for fiscal year 2018 of \$173,417. For additional information see *Separation Arrangements with Michael Falvey*. Under the 2018 annual performance-based cash incentive program, awards were determined by first establishing a bonus pool. The bonus pool was calculated by aggregating the maximum awards for all eligible participants and then multiplying that sum by a modifier established by our compensation committee based on our performance as measured against the 2018 corporate goals. Under the 2018 annual performance-based cash incentive program, the corporate performance level on which such modifier was based could range from 0% to 136.25%. In addition, our compensation committee had the discretion to adjust upward or downward any award and/or the pool as it deemed appropriate.

In making its determination regarding awards under the 2018 annual performance-based cash incentive program, our compensation committee considered our success against our 2018 corporate goals. The 2018 corporate goals approved by our board and compensation committee, the relative weightings assigned to each goal at the beginning of the year, our actual achievement during the performance period as a percentage of target and the weighted performance against these corporate goals for 2018, as approved by our compensation committee, were as follows:

| 2018 Corporate Goals | Relative Weighting | Actual Achievement for 2018 (%) | Weighted Performance |
|--|---------------------------|--|-----------------------------|
| Overall Response Rate (ORR) from STORM study | 20% | 125% | 25% |
| Submission of NDA based on STORM study to the FDA | 30% | 167% | 50% |
| SADAL study enrollment and topline results | 10% | 125% | 12.5% |
| Complete enrollment of BOSTON study | 10% | 100% | 10% |
| Form additional strategic alliances | 10% | 50% | 5% |
| Achieve a year-end cash balance of greater than \$200 million or \$225 million | 15% | 125% | 18.75% |
| Employee retention reduce voluntary turnover of top performing employees | 5% | 100% | 5% |
| Approved 2018 Corporate Performance Level | 100% | | 126.25% |

For each of the 2018 corporate goals, our compensation committee set both target performance levels, reflecting achievement of the goal for the period, and aggressive performance levels, reflecting exceptional performance (other than for the employee retention goal, which had only a target performance level). The compensation committee determined, in its discretion, that achieving the target performance level for a goal during the period resulted in actual achievement at 100%, and achieving the aggressive performance level for a goal resulted in actual achievement at 125%, or in the case of the NDA submission goal, at 167%, given the significant effort required to achieve the aggressive performance level for that goal. The compensation committee determined that for all corporate goals for 2018, target or aggressive performance was achieved other than for the goal related to strategic alliances for which the compensation committee determined that actual achievement was 50%.

Specifically, during 2018, we made significant progress on our clinical development and business goals, including:

Announcing in April 2018 that selinexor achieved an overall response rate of 25.4% in the Phase 2b STORM study;

Completing in August 2018 the rolling submission of an NDA to the FDA with a request for accelerated approval for selinexor as a new treatment for patients based on the results of the STORM study;

- 31 -

Table of Contents

Reporting that selinexor achieved an overall response rate of 29.6% in the Phase 2b SADAL study;

Completing the enrollment of the Phase 3 BOSTON study;

Generating upfront payments of approximately \$22 million in connection with our strategic transactions with Biogen MA Inc., a subsidiary of Biogen Inc., and Antengene Therapeutics Limited;

Completing the year with cash, cash equivalents, restricted cash and investments as of December 31, 2018 totaling \$330.9 million; and

Reducing net voluntary turnover of top performing employees by 50% relative to turnover during 2017. Based on our overall performance during 2018, our compensation committee determined that we achieved 126.25% of our corporate goals for 2018, which allows us to focus our development efforts and further advance our programs and business goals in 2019. Given the strong contributions of each named executive officer to the achievement of our corporate goals for 2018, for Messrs. Primiano and Varadan, the compensation committee determined and, for Drs. Kauffman and Shacham, the compensation committee recommended to the board of directors and the board of directors determined, that their bonuses for 2018 are entirely based on corporate performance relative to the corporate goals. However, actual bonuses approved for 2018 for Drs. Kauffman and Shacham reflect reduced amounts, at the request of Drs. Kauffman and Shacham, of \$148,000 and \$101,000, respectively, to offset a portion of the cash bonuses paid in August 2018 to certain other employees of the company for their contributions to the company's submission of its first NDA to the FDA.

Equity Incentive Awards

We use our equity awards program to encourage executives to deliver long-term company performance, align executive and stockholder interests and promote retention. The market for qualified and talented executives in the biopharmaceutical industry is highly competitive and we compete for talent with many companies that have greater resources than we do. Accordingly, we believe equity compensation is a crucial component of any competitive executive compensation package we offer.

Historically, our equity awards have generally taken the form of stock options. We typically grant stock options to each of our executive officers upon commencement of employment, annually in conjunction with our review of individual performance, in connection with a promotion or as a special incentive.

All stock option awards to our executive officers are approved by our compensation committee (except, in the case of Drs. Kauffman and Shacham, the compensation committee recommends, and the board of directors approves their stock option awards) and, other than stock option awards to new hires, are typically granted at our compensation committee's and board of directors' meetings at the beginning of the year. Stock option awards may vary among our executive officers based on their positions and annual performance assessments. In addition, our compensation committee reviews all components of the executive's compensation to ensure that his or her total compensation is aligned with our overall philosophy and objectives. All stock options granted to our executives have exercise prices equal to the fair market value of our common stock on the date of grant, so that the recipient will not earn any compensation from his or her options unless our share price increases above the exercise price on the date of grant. Accordingly, this portion of our executive officers' compensation is at risk and is directly aligned with stockholder

value creation.

In addition, the stock options granted to our executive officers typically vest over four years. Typically, the stock options we grant to our executives have a ten-year term and vest as to 25% of the shares on the first anniversary of the grant date and then monthly thereafter until the fourth anniversary of such date. Vesting of option grants to employees ceases upon termination of engagement with the company and exercise rights typically cease three months following termination of engagement with the company, except in the case of death or disability. Prior to the exercise of an option, the option holder does not have any rights as a stockholder with respect to the shares subject to such option, including voting rights and the right to receive dividends or dividend equivalents.

- 32 -

Table of Contents

In January 2018, our compensation committee approved annual equity incentive awards for Messrs. Falvey and Primiano and our compensation committee recommended to our board of directors and our board of directors approved annual equity incentive awards for Drs. Kauffman and Shacham. The annual equity incentive awards granted to our named executive officers serving at that time are set forth in the table below:

| Executive | 2018 Option Award (# Options) | Strike Price Per Share(1) |
|------------------|--|--------------------------------------|
| Dr. Kauffman | 200,000 | \$ 10.45 |
| Dr. Shacham | 200,000 | \$ 10.45 |
| Mr. Falvey | 95,000 | \$ 10.45 |
| Mr. Primiano(2) | 125,000 | \$ 10.45 |

(1) The exercise price per share is equal to the closing price per share of the company's common stock on the Nasdaq Global Select Market on the grant date, January 24, 2018.

(2) The larger option award to Mr. Primiano was intended to recognize him for his promotion to Executive Vice President, Chief Business Officer, General Counsel and Secretary effective January 24, 2018.

Our board of directors appointed Mr. Varadan as our Executive Vice President, Chief Commercial Officer effective June 22, 2018. In connection with his appointment, our compensation committee awarded Mr. Varadan a stock option to purchase 150,000 shares of the company's common stock. The stock option was awarded outside our 2013 Stock Incentive Plan on June 22, 2018 as an inducement material to Mr. Varadan entering into employment with the company in accordance with Nasdaq listing Rule 5635(c)(4). The stock option has an exercise price of \$18.68 per share, which was the closing price of the company's common stock on the Nasdaq Global Select Market on the grant date of June 22, 2018 and has substantially the same terms as stock options granted under our 2013 Stock Incentive Plan. In setting Mr. Varadan's compensation, our compensation committee considered compensation benchmark data relative to the 2018 peer group, internal pay equity relative to our other executives and Mr. Varadan's experience. For a discussion of the terms of Mr. Varadan's offer letter see *Offer Letter for Anand Varadan*.

*Benefits and Other Compensation***Health and Welfare Benefits**

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

401(k) Retirement Plan

We maintain a 401(k) retirement plan that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Internal Revenue Code. In general, all of our U.S.-based employees aged 18 or older are eligible to participate in the 401(k) plan upon commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the statutorily prescribed limit, equal to \$18,500 (an additional \$6,000 in contributions is allowed for participants age 50 and over) in 2018 and have the amount of the reduction contributed to the 401(k) plan. We also match employee contributions to 401(k) plans up to a maximum of 4% of an employee's cash compensation during each pay period.

Severance and Change in Control Benefits

Under our employment agreements and offer letters with our named executive officers, we have agreed to provide severance and other benefits in the event of the termination of their employment under specified

- 33 -

Table of Contents

circumstances. We have provided more detailed information about these benefits, along with estimates of their value under various circumstances, under the captions *Executive Compensation Employment Agreements, Severance and Change in Control Arrangements*, and *Executive Compensation Potential Payments Upon Termination or Change in Control* below.

We believe providing severance and/or change in control benefits as a component of our compensation structure can help us compete for executive talent and attract and retain highly talented executive officers whose contributions are critical to our long-term success. After consultation with Arnosti, we believe that our severance and change in control benefits are appropriate.

Offer Letter for Anand Varadan

In June 2018, our compensation committee approved, and we entered into, an offer letter with Mr. Varadan that provided for a \$405,000 annual base salary, a \$25,000 cash sign-on bonus, a target award percentage of 40% under our annual performance-based cash incentive program and a stock option to purchase 150,000 shares of the company's common stock. Pursuant to his offer letter, the stock option was awarded outside our 2013 Stock Incentive Plan on June 22, 2018 as an inducement material to Mr. Varadan entering into employment with the company in accordance with Nasdaq listing Rule 5635(c)(4). The stock option has an exercise price of \$18.68 per share, which was the closing price of the company's common stock on the Nasdaq Global Select Market on the grant date of June 22, 2018 and has substantially the same terms as stock options granted under our 2013 Stock Incentive Plan. In setting Mr. Varadan's compensation, our compensation committee considered compensation benchmark data relative to the 2018 peer group, internal pay equity relative to our other executives and Mr. Varadan's experience.

Separation Arrangements with Michael Falvey

On January 17, 2019, Michael Falvey resigned as Executive Vice President, Chief Financial Officer and Treasurer of the company effective January 18, 2019. Mr. Falvey had previously notified us of his intention to resign. In connection with his resignation, our compensation committee approved, and we entered into a separation agreement and a consulting agreement with Mr. Falvey. Pursuant to the terms of the separation agreement and in consideration of a customary release of any claims by Mr. Falvey against us, Mr. Falvey is entitled to severance benefits consisting of severance pay in the aggregate amount of \$202,000 (to be paid in semi-monthly installments for a period of six months) and continuation of healthcare benefit premium payments until no later than July 31, 2019, continued vesting of his unvested equity awards until April 18, 2019 pursuant to the terms of the consulting agreement, and was entitled to payment of an annual performance-based cash incentive for fiscal year 2018 of \$173,417, which we paid in February 2019.

Pursuant to the terms of the consulting agreement, Mr. Falvey will provide certain advisory and other consulting services to us from January 18, 2019 until July 18, 2019 (or such earlier date upon which the agreement terminates in accordance with its terms). As full compensation for such services, Mr. Falvey's outstanding and unvested equity awards shall continue to vest until April 18, 2019, according to their terms, and his vested equity awards as of that date will remain exercisable for three months following the termination of the consulting agreement.

Tax and Accounting Considerations

Section 162(m) of the Internal Revenue Code generally disallows a tax deduction to public companies for compensation in excess of \$1 million paid in any taxable year to each of the company's chief executive officer, chief financial officer and three most highly compensated officers (other than the chief executive officer and chief financial officer). Historically, compensation paid to the Company's chief financial officer and compensation that qualified

under Section 162(m) as performance-based compensation was exempt from the deduction limitation. However, subject to certain transition rules, tax reform legislation signed into law on

Table of Contents

December 22, 2017, expanded the deduction limitation to apply to compensation in excess of \$1 million paid in any taxable year to the company's chief financial officer and eliminated the qualified performance-based compensation exception. As a result, for taxable years beginning after December 31, 2017, all compensation in excess of \$1 million paid to each of the executives described above (other than certain grandfathered compensation or compensation paid pursuant to certain equity awards granted during the transition period following our initial public offering) will not be deductible by us. The board of directors reserves the right to use its business judgment to authorize compensation payments that may be subject to the limitations under Section 162(m) when the board of directors believes that compensation is appropriate and in the best interests of the company and our stockholders, after taking into consideration changing business conditions and performance of our employees.

Hedging and Pledging Policy

We have an insider trading policy that is applicable to all of our employees and members of our board of directors. The policy prohibits those individuals and their related persons from engaging in any speculative transactions involving our stock, including the following activities: short sales of our securities, including short sales against the box; purchases or sales of puts, calls or other derivative securities based on our securities; standing orders with brokers other than under an approved trading plan, purchases of financial instruments (including prepaid variable forward contracts, equity swaps, collars and exchange funds) that are designed to hedge or offset any decrease in the market value of our securities; the purchase of our securities on margin; borrowing against our securities held in a margin account; or pledging our securities as collateral for a loan. However, an exception may be granted where a person wishes to pledge our securities as collateral for a loan (other than a margin loan) and clearly demonstrates the financial capacity to repay the loan without resort to the pledged securities. Any person who wishes to pledge our securities as collateral for a loan must submit a request for approval to our principal financial officer. In addition, any such request by a director or executive officer must also be reviewed and approved by the Audit Committee.

Compensation Risk Assessment

Our compensation committee has reviewed and evaluated the philosophy and standards on which our compensation programs have been developed and implemented across our company. It is our belief that our compensation programs do not encourage inappropriate actions or risk taking by our executive officers. We do not believe that any risks arising from our employee compensation policies and practices are reasonably likely to have a material adverse effect on our company. In addition, we do not believe that the mix and design of the components of our executive compensation program encourage management to assume excessive risks.

We believe that our current business process and planning cycle fosters the following behaviors and controls that mitigate the potential for adverse risk caused by the action of our executives:

annual establishment of corporate objectives for our performance-based short-term cash incentive compensation programs that are consistent with our annual operating and strategic plans, that are designed to achieve the proper risk/reward balance, and that should not require excessive risk taking to achieve;

the mix between fixed and variable, short- and long-term and cash and equity compensation are designed to encourage strategies and actions that balance our short-term and long-term best interests; and

equity awards generally vest over a period of time, which we believe encourages executives to take a long-term view of our business.

Report of the Compensation Committee on Executive Compensation

The Compensation Committee of the Board of Directors of Karyopharm Therapeutics Inc. has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with

- 35 -

Table of Contents

management. Based upon such review and discussions, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement.

By the Compensation Committee of the Board of Directors of Karyopharm Therapeutics Inc.

Deepika R. Pakianathan Ph.D., Chair

Barry E. Greene

This Compensation Committee Report does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other Karyopharm Therapeutics Inc. filing with the SEC, except to the extent that Karyopharm Therapeutics Inc. specifically incorporates this Report by reference into another Karyopharm Therapeutics Inc. filing.

Summary Compensation Table

The following table sets forth information regarding compensation earned by each of our named executive officers during each of the fiscal years ended December 31, 2016, 2017 and 2018. Our named executive officers for 2018 are Dr. Michael Kauffman, our Chief Executive Officer; Dr. Sharon Shacham, our President and Chief Scientific Officer; Mr. Christopher Primiano, our Executive Vice President, Chief Business Officer, General Counsel and Secretary; Mr. Anand Varadan, our Executive Vice President, Chief Commercial Officer; and Mr. Michael Falvey, our former Executive Vice President, Chief Financial Officer and Treasurer. Mr. Falvey resigned as an officer of the company effective January 18, 2019.

Summary Compensation Table

| Name and Principal Position | Year | Salary(\$) | Bonus (\$)(1) | Non-Equity | | | Total (\$) |
|---|------|------------|------------------|-----------------------------|---|--------------------------------------|------------|
| | | | | Option Awards (\$)(2) | Incentive Plan Compensation (\$)(3) | All Other Compensation (\$)(4) | |
| Michael G. Kauffman, M.D., Ph.D. <i>Chief Executive Officer</i> (5) | 2018 | 550,000 | | 1,444,660 | 268,625 | 11,660 | 2,274,945 |
| | 2017 | 530,500 | | 1,857,650 | 251,503 | 11,460 | 2,651,113 |
| | 2016 | 515,000 | | 758,523 | 247,200 | 11,260 | 1,531,983 |
| Michael Falvey, M.S.M. <i>Former Executive Vice President, Chief Financial Officer and Treasurer</i> (6) | 2018 | 404,000 | | 686,214 | 173,417 | 11,660 | 1,275,291 |
| Sharon Shacham, Ph.D., M.B.A. <i>President and Chief Scientific Officer</i> | 2018 | 450,000 | | 1,444,660 | 183,063 | 11,660 | 2,089,383 |
| | 2017 | 435,000 | | 1,857,650 | 171,856 | 11,460 | 2,475,966 |
| | 2016 | 415,000 | | 758,523 | 166,000 | 11,260 | 1,350,783 |
| Christopher B. Primiano, J.D., M.B.A. <i>Executive Vice President, Chief Business Officer, General Counsel and Secretary</i> | 2018 | 404,000 | | 902,913 | 204,020 | 11,660 | 1,522,593 |
| | 2017 | 390,000 | 31,500 | 876,811 | 133,770 | 11,460 | 1,443,541 |
| | 2016 | 360,000 | | 178,476 | 122,000 | 11,260 | 671,736 |
| Anand Varadan, M.B.A. | 2018 | 211,846 | 25,000 | 1,951,950 | 102,263 | 11,358 | 2,302,417 |

*Executive Vice President, Chief
Commercial Officer(6)*

- (1) The 2017 bonus amount reported for Mr. Primiano represents a \$1,500 bonus paid in November 2017 that was approved by the compensation committee related to his efforts to complete and enter into our license agreement with Ono Pharmaceutical Co., Ltd., which we announced on October 12, 2017, and a \$30,000 discretionary bonus paid in February 2018 approved by our compensation committee in connection with its review and approval of Mr. Primiano's annual performance-based cash incentive compensation for his efforts in 2017 related to the transaction with Ono Pharmaceutical Co., Ltd. in connection with specific

- 36 -

Table of Contents

- efforts by Mr. Primiano in 2017 to efficiently and effectively enter into a significant strategic transaction benefiting our company. The 2018 bonus amount reported for Mr. Varadan represents a \$25,000 sign-on bonus paid in July 2018. See *Compensation Discussion and Analysis Offer Letter for Anand Varadan*. for additional information regarding Mr. Varadan's sign-on bonus.
- (2) Amounts represent the aggregate fair value amount computed as of the grant date of the option awards granted during 2016, 2017 and 2018 in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 10, Stock-based Compensation, of the notes to our consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.
 - (3) Amounts represent awards to our named executive officers under our annual performance-based cash incentive program. See *Compensation Discussion and Analysis Components of Executive Compensation Annual Performance-Based Cash Incentives* for a description of that program. Annual bonus compensation for 2016 was earned in 2016 and paid in 2017. Annual bonus compensation for 2017 was earned in 2017 and paid in 2018. Annual bonus compensation for 2018 was earned in 2018 and paid in 2019.
 - (4) Amounts represent (i) the dollar value of life and accidental death and dismemberment (AD&D) insurance premiums paid by us on behalf of our named executive officers and (ii) the amount we contributed to our 401(k) plan in respect of our named executive officers, which is tested annually for compliance with applicable tax laws and limited accordingly. In 2016, we paid \$660 life and AD&D insurance premiums for each of Dr. Kauffman, Dr. Shacham and Mr. Primiano. Also, in 2016, we made 401(k) plan contributions of \$10,600 for each of Dr. Kauffman, Dr. Shacham and Mr. Primiano. In 2017, we paid \$660 life and AD&D insurance premiums for each of Dr. Kauffman, Dr. Shacham and Mr. Primiano. Also, in 2017, we made 401(k) plan contributions of \$10,800 for each of Dr. Kauffman, Dr. Shacham and Mr. Primiano. In 2018, we paid \$660 in life and AD&D insurance premiums for each of Dr. Kauffman, Dr. Shacham, Mr. Primiano and Mr. Falvey and \$358 for Mr. Varadan. Also, in 2018, we made 401(k) plan contributions of \$11,000 for each of Dr. Kauffman, Dr. Shacham, Mr. Primiano, Mr. Varadan and Mr. Falvey.
 - (5) Dr. Kauffman also serves as a member of our board of directors but does not receive any compensation for his service as a director.
 - (6) Messrs. Varadan and Falvey were not NEOs during 2017 or 2016. Mr. Varadan was appointed as Executive Vice President, Chief Commercial Officer of the company on June 22, 2018. Mr. Falvey served as Executive Vice President, Chief Financial Officer and Treasurer of the company during 2018 but resigned effective January 18, 2019.

Table of Contents**2018 Grants of Plan-Based Awards Table**

The following table sets forth information regarding each grant of an award made to a NEO during 2018 under any plan, contract, authorization or arrangement pursuant to which cash, securities, similar instruments or other property may be received.

**Estimated Future Payouts
Under
Non-Equity Incentive Plan Awards
(\$)(1)**

| Name and Principal Position | Grant Date | Threshold (\$) | Target (\$) | Maximum (\$) | All Other | | |
|--|------------|----------------|-------------|--------------|--|---|--|
| | | | | | Awards: Number of Securities Underlying Options (#)(2) | Exercise or Base Price of Option Awards (\$/Sh) | Grant Date Fair Value of Option Awards (3)(\$) |
| Michael G. Kauffman, M.D., Ph.D. <i>Chief Executive Officer</i> | 1/24/2018 | | 330,000 | 449,625 | 200,000 | 10.45 | 1,444,660 |
| Michael Falvey, M.S.M. <i>Former Executive Vice President, Chief Financial Officer and Treasurer</i> | 1/24/2018 | | 161,600 | 220,180 | 95,000 | 10.45 | 686,214 |
| Sharon Shacham, Ph.D., M.B.A. <i>President and Chief Scientific Officer</i> | 1/24/2018 | | 225,000 | 306,563 | 200,000 | 10.45 | 1,444,660 |
| Christopher B. Primiano, J.D., M.B.A. <i>Executive Vice President, Chief Business Officer, General Counsel and Secretary</i> | 1/24/2018 | | 161,600 | 220,180 | 125,000 | 10.45 | 902,913 |
| Anand Varadan, M.B.A. <i>Executive Vice President, Chief Commercial Officer</i> | 6/22/2018 | | 81,000 | 110,363 | 150,000 | 18.68 | 1,951,950 |

(1) The amounts in these columns reflect the target and maximum payouts under the annual performance-based cash incentive program for 2018. There was no threshold-level payout under this program. The maximum possible payout under the program was 136.25% of the target payout. However, in its discretion, the Compensation Committee may adjust upward or downward any award as it deemed appropriate. The amounts actually paid to the NEOs under the annual performance-based cash incentive program for 2018 are shown in the Non-Equity Incentive Plan Compensation column of the Summary Compensation Table. For additional information about our annual performance-based cash incentive program, please see *Components of Executive Compensation Annual Performance-Based Cash Incentives*.

(2)

The amounts in this column reflect the number of stock options awarded to NEOs other than Mr. Varadan under our 2013 Stock Incentive Plan. The amount for Mr. Varadan reflects the new-hire stock option awarded outside our 2013 Stock Incentive Plan on June 22, 2018 as an inducement material to Mr. Varadan entering into employment with the company in accordance with Nasdaq listing Rule 5635(c)(4). All of these stock options become exercisable as to 25% of the shares underlying the option on the first anniversary of the grant date, and as to an additional 1/48th of the shares underlying the option on a monthly basis thereafter, subject to continued engagement with the company. For additional information about stock options awards, please see *Components of Executive Compensation Equity Incentive Awards* and *Offer Letter for Anand Varadan*.

- (3) The amounts in this column reflect the aggregate grant date fair value of the option awards granted determined in accordance with ASC 718, Stock Compensation. See footnote 2 to the Summary Compensation Table for a description of the assumptions used in determining the grant date fair value of these awards.

Table of Contents**Outstanding Equity Awards at 2018 Year-End**

The following table sets forth information concerning outstanding equity awards for each of our NEOs at December 31, 2018.

| Name | Option Awards | | | |
|---------------------------------------|---|---|----------------------------|------------------------|
| | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (#) Unexercisable | Option Exercise Price (\$) | Option Expiration Date |
| Michael G. Kauffman, M.D., Ph.D. | 436,061 | | \$ 4.75 | 9/2/2023 |
| | 140,000 | | \$ 23.66 | 12/17/2023 |
| | 195,831 | 4,169(1) | \$ 26.65 | 01/18/2025 |
| | 123,958 | 46,042(2) | \$ 6.54 | 1/14/2026 |
| | 119,791 | 130,209(3) | \$ 10.39 | 1/19/2027 |
| | | 200,000(4) | \$ 10.45 | 01/23/2028 |
| Michael F. Falvey, M.S.M. | 39,062 | 85,938(5) | \$ 10.60 | 09/10/2027 |
| | | 95,000(4) | \$ 10.45 | 01/23/2028 |
| Sharon Shacham, Ph.D., M.B.A. | 27,857 | | \$ 0.03 | 10/21/2020 |
| | 23,567 | | \$ 0.03 | 10/31/2020 |
| | 7,553 | | \$ 0.03 | 10/31/2020 |
| | 480,303 | | \$ 4.75 | 9/2/2023 |
| | 140,000 | | \$ 23.66 | 12/17/2023 |
| | 195,831 | 4,169(1) | \$ 26.65 | 01/18/2025 |
| | 123,958 | 46,042(2) | \$ 6.54 | 1/14/2026 |
| | 119,791 | 130,209(3) | \$ 10.39 | 1/19/2027 |
| | | 200,000(4) | \$ 10.45 | 01/23/2028 |
| Christopher B. Primiano, J.D., M.B.A. | 75,000 | | \$ 32.40 | 04/15/2024 |
| | 122,394 | 2,606(1) | \$ 26.65 | 01/18/2025 |
| | 60,937 | 14,063(6) | \$ 14.94 | 09/17/2025 |
| | 7,166 | 10,834(2) | \$ 6.54 | 01/14/2026 |
| | 51,541 | 61,459(3) | \$ 10.39 | 01/19/2027 |
| | | 125,000(4) | \$ 10.45 | 01/23/2028 |
| Anand Varadan, M.B.A. | | 150,000(7) | \$ 18.68 | 06/21/2028 |

- (1) The unvested awards vested in equal monthly installments through January 1, 2019.
- (2) The unvested awards are scheduled to vest in equal monthly installments through January 15, 2020.
- (3) The unvested awards are scheduled to vest in equal monthly installments through January 20, 2021.
- (4) The unvested awards vested with respect to 25% of the shares on January 24, 2019, and the remaining unvested awards are scheduled to vest in equal monthly installments through January 24, 2022.
- (5)

The unvested award vested with respect to 25% of the shares on September 11, 2018, and the remaining unvested awards are scheduled to vest in equal monthly installments through September 11, 2021.

- (6) The unvested award is scheduled to vest in equal monthly installments through September 18, 2019.
- (7) The unvested award vests with respect to 25% of the shares on June 22, 2019, and the remaining unvested awards are scheduled to vest in equal monthly installments through June 22, 2022.

Table of Contents**2018 Option Exercises and Stock Vested Table**

The following table sets forth, for each of the NEOs, information with respect to the exercise of stock options during the year ended December 31, 2018.

| Name | Option Awards | |
|---------------------------------------|--|---|
| | Number of Shares Acquired on Exercise (#) | Value Realized on Exercise (\$)(1) |
| Michael Kauffman, M.D., Ph.D. | 110,000 | 1,480,682 |
| Michael Falvey, M.S.M. | | |
| Sharon Shacham, Ph.D., M.B.A. | 135,000 | 2,009,180 |
| Christopher B. Primiano, J.D., M.B.A. | 10,000 | 108,450 |
| Anand Varadan, M.B.A. | | |

- (1) Value realized on exercise of stock option awards does not represent proceeds from any sale of any common stock acquired upon exercise, but is determined by multiplying the number of shares acquired upon exercise by the difference between the per share exercise price of the option and the closing price of a share of our common stock on the Nasdaq Global Select Market at each time of exercise.

Employment Agreements, Severance and Change in Control Arrangements

We have entered into employment agreements or offer letters with each of our NEOs pursuant to which such NEOs are employed at will, meaning the executive or we may terminate the employment arrangement at any time. These agreements establish the NEO's title, initial compensation arrangements, eligibility for benefits made available to employees generally and also provide for certain benefits upon termination of employment under specified conditions. The following summarizes the termination benefits under our NEOs' existing employment agreements. Receipt of these termination benefits is subject to the NEO's execution of a general release of claims.

If we terminate Dr. Kauffman's employment without cause or if Dr. Kauffman terminates his employment for good reason, in either case, prior to a change of control, we will be required to pay as severance to Dr. Kauffman his base salary for 12 months. If we terminate Dr. Kaufman's employment without cause or if Dr. Kauffman terminates his employment for good reason, in either case, after a change of control, we will be required to pay as severance to Dr. Kauffman his base salary for 18 months. If Dr. Kauffman elects to continue his and his eligible dependents participation in our medical and dental benefit plans pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1986, or COBRA, we will pay the monthly premium to continue such coverage during the applicable severance period.

If we terminate Dr. Shacham's employment without cause or if Dr. Shacham terminates her employment for good reason, in either case, prior to a change of control, we will be required to pay as severance to Dr. Shacham her base salary for nine months. If we terminate Dr. Shacham's employment without cause or if Dr. Shacham terminates her employment for good reason, in either case, after a change of control, we will be required to pay as severance to Dr. Shacham her base salary for 12 months. If Dr. Shacham elects to continue her and her eligible dependents participation in our medical and dental benefit plans pursuant to COBRA, we will pay the monthly premium to continue such coverage during the applicable severance period.

If we terminate Mr. Primiano's employment without cause or if Mr. Primiano terminates his employment for good reason, in either case, prior to a change of control, we will be required to pay as severance to Mr. Primiano his base salary for six months. If we terminate Mr. Primiano's employment without cause, or if Mr. Primiano resigns for good reason, in either case, within one year following a change of control, we will be required to pay as severance to Mr. Primiano his base compensation for 12 months. If Mr. Primiano elects to continue his and his eligible dependents participation in the company's medical and dental benefit plans pursuant to COBRA, the company will pay the monthly premium to continue such coverage during the applicable severance period.

Table of Contents

If we terminate Mr. Varadan's employment without cause or if Mr. Varadan terminates his employment for good reason, in either case, prior to a change of control, we will be required to pay as severance to Mr. Varadan his base salary for six months. If we terminate Mr. Varadan's employment without cause, or if Mr. Varadan resigns for good reason, in either case, within one year following a change of control, we will be required to pay as severance to Mr. Varadan his base compensation for 12 months. If Mr. Varadan elects to continue his and his eligible dependents participation in the company's medical and dental benefit plans pursuant to COBRA, the company will pay the monthly premium to continue such coverage during the applicable severance period.

If we terminate Mr. Falvey's employment without cause or if Mr. Falvey terminates his employment for good reason, in either case, prior to a change of control, we will be required to pay as severance to Mr. Falvey his base salary for six months. If we terminate Mr. Falvey's employment without cause, or if Mr. Falvey resigns for good reason, in either case, within one year following a change of control, we will be required to pay as severance to Mr. Falvey his base compensation for 12 months. If Mr. Falvey elects to continue his and his eligible dependents participation in the company's medical and dental benefit plans pursuant to COBRA, the company will pay the monthly premium to continue such coverage during the applicable severance period. On January 17, 2019, Michael Falvey resigned as Executive Vice President, Chief Financial Officer and Treasurer of the company effective January 18, 2019. Mr. Falvey had previously notified us of his intention to resign. In connection with his resignation, our compensation committee approved, and we entered into a separation agreement and a consulting agreement with Mr. Falvey. For additional information see *Separation Arrangements with Michael Falvey*.

Potential Payments Upon Termination or Change in Control

The amount of compensation and benefits payable to each NEO who was employed on December 31, 2018 under our current employment agreements in various termination and change in control situations has been estimated in the tables below. The value of the equity vesting acceleration was calculated for each of the tables below based on the assumption that the change in control and the NEO's employment termination occurred on December 31, 2018, the last business day of the fiscal year ended December 31, 2018. The per share closing price of our common stock on the Nasdaq Global Select Market as of December 31, 2018, the last trading day of 2018, was \$9.37, which was used as the value of our common stock in the change in control. The value of the option vesting acceleration was calculated by multiplying the number of unvested option shares subject to vesting acceleration as of December 31, 2018, by the difference between the per share closing price of our common stock as of December 31, 2018, and the per share exercise price for such unvested option shares. We are not required to make any payments to any of our named executive officers in the event he or she voluntarily resigns without good reason or we terminate his or her employment for cause.

Dr. Michael G. Kauffman

The following table describes the potential payments and benefits upon employment termination for Dr. Kauffman, as if his employment terminated as of December 31, 2018, the last business day of the fiscal year.

| Executive Benefits and Payment upon Termination | Voluntary Resignation For Good Reason in Connection with Sale Event (\$) | Termination by Company Not in Connection with a Sale Event (\$) | Termination by Company without Cause or Voluntary Resignation for Good Reason |
|--|---|--|--|
|--|---|--|--|

| | | | within 12 Months Following a Sale Event (\$) |
|--|----------------|----------------|---|
| Compensation: | | | |
| Base salary | 550,000(1) | 550,000(1) | 825,000(2) |
| Acceleration of unvested and outstanding stock options | | | 481,100(3) |
| Benefits and Perquisites: | | | |
| Health care continuation(4) | | | |
| Total | 550,000 | 550,000 | 1,306,100 |

- 41 -

Table of Contents

- (1) Twelve months of 2018 base salary continuation.
- (2) Eighteen months of 2018 base salary continuation.
- (3) Value attributable to the acceleration of 100% of Dr. Kauffman's (i) then unvested and outstanding options, determined by multiplying the number of shares underlying such options by the difference between the per share exercise price of the options and the per share closing price of our common stock on the Nasdaq Global Select Market on December 31, 2018.
- (4) Dr. Kauffman does not separately participate in our health and dental insurance as the participation by Dr. Shacham, the spouse of Dr. Kauffman, covers Dr. Kauffman.

Dr. Sharon Shacham

The following table describes the potential payments and benefits upon employment termination for Dr. Shacham, as if her employment terminated as of December 31, 2018, the last business day of the fiscal year.

| | Voluntary Resignation For Good Reason Not in Connection with Sale Event (\$) | Termination by Company without Cause Not in Connection with a Sale Event (\$) | Termination by Company without Cause or Voluntary Resignation for Good Reason within 12 Months Following a Sale Event (\$) |
|--|---|--|---|
| Executive Benefits and Payment upon Termination | | | |
| Compensation: | | | |
| Base salary | 337,500(1) | 337,500(1) | 450,000(2) |
| Acceleration of unvested and outstanding stock options | | | 481,100(3) |
| Benefits and Perquisites: | | | |
| Health care continuation(4) | 21,310(4) | 21,310(4) | 28,413(5) |
| Total | 358,810 | 358,810 | 959,513 |

- (1) Nine months of 2018 base salary continuation.
- (2) Twelve months of 2018 base salary continuation.
- (3) Value attributable to the acceleration of 100% of Dr. Shacham's (i) then unvested and outstanding options, determined by multiplying the number of shares underlying such options by the difference between the per share exercise price of the options and the per share closing price of our common stock on the Nasdaq Global Select Market on December 31, 2018.
- (4) Payment of the COBRA health and dental insurance premiums for Dr. Shacham and her dependents until the earlier of (a) nine months following the date of termination, or (b) the end of the NEO's COBRA health continuation.
- (5) Payment of the COBRA health and dental insurance premiums for Dr. Shacham and her dependents until the earlier of (a) 12 months following the date of termination, or (b) the end of the NEO's COBRA health continuation.

continuation.

- 42 -

Table of Contents*Christopher Primiano*

The following table describes the potential payments and benefits upon employment termination for Mr. Primiano, as if his employment terminated as of December 31, 2018, the last business day of the fiscal year.

| | Voluntary Resignation For Good Reason Not in Connection with Sale Event (\$) | Termination by Company without Cause Not in Connection with a Sale Event (\$) | Termination by Company without Cause or Voluntary Resignation for Good Reason within 12 Months Following a Sale Event (\$) |
|--|---|---|--|
| Executive Benefits and Payment upon Termination Compensation: | | | |
| Base salary | 202,000(1) | 202,000(1) | 404,000(2) |
| Acceleration of unvested and outstanding stock options | | | 50,940(3) |
| Benefits and Perquisites: | | | |
| Health care continuation(4) | 9,665(4) | 9,665(4) | 19,330(5) |
| Total | 211,665 | 211,665 | 474,270 |

- (1) Six months of 2018 base salary continuation.
- (2) Twelve months of 2018 base salary continuation.
- (3) Value attributable to the acceleration of 100% of Mr. Primiano's (i) then unvested and outstanding options, determined by multiplying the number of shares underlying such options by the difference between the per share exercise price of the options and the per share closing price of our common stock on the Nasdaq Global Select Market on December 31, 2018.
- (4) Payment of the COBRA health and dental insurance premiums for Mr. Primiano and his dependents until the earlier of (a) six months following the date of termination, or (b) the end of the NEO's COBRA health continuation.
- (5) Payment of the COBRA health and dental insurance premiums for Mr. Primiano and his dependents until the earlier of (a) 12 months following the date of termination, or (b) the end of the NEO's COBRA health continuation.

Anand Varadan

The following table describes the potential payments and benefits upon employment termination for Mr. Varadan, as if his employment terminated as of December 31, 2018, the last business day of the fiscal year.

Executive Benefits and Payment upon Termination

| | Voluntary Resignation For Good Reason Not in Connection with Sale Event (\$) | Termination by Company without Cause Not in Connection with a Sale Event (\$) | Termination by Company without Cause or Voluntary Resignation for Good Reason within 12 Months Following a Sale Event (\$) |
|--|---|--|---|
| Compensation: | | | |
| Base salary | 202,500(1) | 202,500(1) | 405,000(2) |
| Acceleration of unvested and outstanding stock options | | | (3) |
| Benefits and Perquisites: | | | |
| Health care continuation(4) | 14,207(4) | 14,207(4) | 28,413(5) |
| Total | 216,707 | 216,707 | 433,413 |

(1) Six months of 2018 base salary continuation.

(2) Twelve months of 2018 base salary continuation.

(3) Value attributable to the acceleration of 100% of Mr. Varadan's (i) then unvested and outstanding options, determined by multiplying the number of shares underlying such options by the difference between the per share exercise price of the options and the per share closing price of our common stock on the Nasdaq

Table of Contents

Global Select Market on December 31, 2018. The per share closing price at December 31, 2018 was lower than the per share exercise price of such option.

- (4) Payment of the COBRA health and dental insurance premiums for Mr. Varadan and his dependents until the earlier of (a) six months following the date of termination, or (b) the end of the NEO's COBRA health continuation.
- (5) Payment of the COBRA health and dental insurance premiums for Mr. Varadan and his dependents until the earlier of (a) 12 months following the date of termination, or (b) the end of the NEO's COBRA health continuation.

Michael Falvey

The following table describes the potential payments and benefits upon employment termination for Mr. Falvey, as if his employment terminated as of December 31, 2018, the last business day of the fiscal year.

| | Voluntary Resignation For Good Reason Not in Connection with Sale Event (\$) | Termination by Company without Cause Not in Connection with a Sale Event (\$) | Termination by Company without Cause or Voluntary Resignation for Good Reason within 12 Months Following a Sale Event (\$) |
|--|---|--|---|
| Executive Benefits and Payment upon Termination | | | |
| Compensation: | | | |
| Base salary | 202,000(1) | 202,000(1) | 404,000(2) |
| Acceleration of unvested and outstanding stock options | | | (3) |
| Benefits and Perquisites: | | | |
| Health care continuation(4) | 11,141(4) | 11,141(4) | 22,281(5) |
| Total | 213,141 | 213,141 | 426,281 |

(1) Six months of 2018 base salary continuation.

(2) Twelve months of 2018 base salary continuation.

(3) Value attributable to the acceleration of 100% of Mr. Falvey's (i) then unvested and outstanding options, determined by multiplying the number of shares underlying such options by the difference between the per share exercise price of the options and the per share closing price of our common stock on the Nasdaq Global Select Market on December 31, 2018. The per share closing price at December 31, 2018 was lower than the per share exercise price of such option.

(4) Payment of the COBRA health and dental insurance premiums for Mr. Falvey and his dependents until the earlier of (a) six months following the date of termination, or (b) the end of the NEO's COBRA health continuation.

(5) Payment of the COBRA health and dental insurance premiums for Mr. Falvey and his dependents until the earlier of (a) 12 months following the date of termination, or (b) the end of the NEO's COBRA health continuation.

Non-Disclosure Agreements

We have entered into non-disclosure and inventions assignment agreements with Drs. Kauffman and Shacham and Messrs. Primiano, Varadan and Falvey. Under the non-disclosure and inventions assignment agreements, Drs. Kauffman and Shacham and Messrs. Primiano, Varadan and Falvey have agreed (i) not to compete with us during his or her employment and for a period of twelve months after the termination of his or her employment; (ii) not to solicit our employees or customers during his or her employment and for a period of twelve months after the termination of his or her employment; (iii) to protect our confidential and proprietary information, and (iv) to assign to us related intellectual property that is developed during the course of his or her employment.

Table of Contents

Equity Compensation Plans and Other Benefits

2013 Stock Incentive Plan

Our board of directors adopted, and our stockholders approved, the 2013 Stock Incentive Plan, which we refer to as the 2013 Plan, which became effective immediately prior to the closing of our initial public offering. The 2013 Plan provides for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, and other stock-based awards. As of March 15, 2019, 1,411,002 shares of our common stock are reserved for issuance under the 2013 Plan. Additional shares of our common stock may also become available for issuance under the 2013 Plan. The number of such additional shares is equal to the sum of (1) the number of shares of our common stock subject to outstanding awards under the amended and restated 2010 stock incentive plan, which we refer to as the 2010 Plan that expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by us at their original issuance price pursuant to a contractual repurchase right and (2) an annual increase to be added on the first day of each fiscal year, until, and including, the fiscal year ending December 31, 2023, equal to the least of (A) 1,939,393 shares of our common stock, (B) 4% of the number of shares of our common stock outstanding on the first day of the fiscal year, and (C) an amount determined by our board of directors.

Our employees, officers, directors, consultants, and advisors, and employees, officers, directors, consultants, and advisors of any of our present or future parent or subsidiary corporations and any other business venture (including, without limitation, joint venture or limited liability company) in which we have a controlling interest, as determined by our board of directors, are eligible to be granted awards under the 2013 Plan. However, incentive stock options may only be granted to employees who are eligible to receive incentive stock options under the Internal Revenue Code.

The 2013 Plan is administered by our board of directors, a committee appointed by our board of directors or one or more officers appointed by such committee or the board of directors. Pursuant to the terms of the 2013 Plan, our board of directors or such committee or officers (subject to the below) selects the recipients of awards and determines:

the number of shares of our common stock covered by options and the conditions and limitations applicable to the exercise of options;

the type of options to be granted;

the duration of options, which may not be in excess of ten years;

the exercise price of options, which must be at least equal to the fair market value of our common stock on the date of grant; and

the number of shares of our common stock subject to any stock appreciation rights, restricted stock awards, RSU awards, or other stock-based awards and the terms and conditions of such awards, including conditions for vesting and repurchase (or forfeiture), issue price and repurchase price (provided that the measurement

price of stock appreciation rights must be at least equal to the fair market value of our common stock on the date of grant and the duration of stock appreciation rights may not be in excess of ten years).

Our board of directors has delegated its powers under the 2013 Plan to our compensation committee. As described above in the section Corporate Governance Committees of the Board of Directors Compensation Committee, our compensation committee has delegated the authority to members of our senior management to grant options and awards of RSUs to new employees below the level of vice president, subject to specified limitations.

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

Table of Contents

distribution to holders of our common stock other than an ordinary cash dividend, our board of directors is required by the 2013 Plan to make equitable adjustments, in a manner determined by our board of directors, to:

the number and class of securities available under, and the share counting rules set forth in, the 2013 Plan;

the number and class of securities and exercise price per share of each outstanding option;

the share and per-share provisions and measurement price of each outstanding stock appreciation right;

the number of shares and the repurchase price per share subject to each outstanding restricted stock award or RSU award; and

the share and per-share-related provisions and purchase price, if any, of any other outstanding stock-based award.

In connection with a merger or other reorganization event (as defined in the 2013 Plan), our board of directors may take any one or more of the following actions as to all or any portion of any outstanding awards other than restricted stock, on such terms as it determines:

provide that all outstanding awards shall be assumed, or substantially equivalent awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof);

upon written notice to a participant, provide that all of the participant's unvested and/or unexercised awards will terminate immediately prior to the consummation of such reorganization event unless exercised by the participant (to the extent then exercisable) within a specified period following the date of such notice;

in the event of a reorganization event pursuant to which holders of shares of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to participants with respect to each award held by a participant equal to (1) the number of shares of our common stock subject to the vested portion of the award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event) multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for termination of such award; and/or

provide that in connection with our liquidation or dissolution, awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings).

Our board of directors is not obligated under the 2013 Plan to treat all awards, all awards held by a participant, or all awards of the same type, identically in connection with a reorganization event.

In the case of RSU awards that are subject to Section 409(a) of the Internal Revenue Code, no assumption or substitution will be permitted and the RSU awards will instead be settled in accordance with the terms of the applicable RSU agreement, and in certain circumstances, any unvested RSU awards will be terminated immediately prior to the consummation of the reorganization event without any payment in exchange therefor.

Upon the occurrence of a reorganization event other than our liquidation or dissolution, the repurchase and other rights with respect to outstanding awards of restricted stock will continue for the benefit of the successor company and will, unless our board of directors otherwise determines, apply to the cash, securities or other property into which our common stock was converted into or exchanged for pursuant to the reorganization event in the same manner and to the same extent as they applied to such restricted stock. Upon the occurrence of a reorganization event involving our liquidation or dissolution, all restrictions and conditions on all restricted stock then outstanding will automatically be deemed terminated or satisfied, unless otherwise provided in the instrument evidencing the award of restricted stock or any other agreement between a participant and us.

Table of Contents

At any time, our board of directors may provide that any award under the 2013 Plan shall become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

In addition, the 2013 Plan provides that, notwithstanding the provisions of the plan that may apply upon a reorganization event and except as otherwise provided for in the instrument evidencing an option or award of restricted stock or any other agreement between us and the participant, upon the occurrence of a change in control event (as defined in the 2013 Plan) each option shall become immediately exercisable and each award of restricted stock shall become immediately free from all conditions and restrictions, if, in either case, the employment of the participant holding such award is terminated by us (or our acquiring or succeeding corporation) without cause (as defined in the 2013 Plan) or by the participant for good reason (as defined in the 2013 Plan), on or prior to the first anniversary of the date of the change in control event. Our board of directors may specify in an award at the time of grant the effect of a change in control event on any stock appreciation right, RSU or other stock-based award.

Except with respect to certain actions requiring stockholder approval under the Internal Revenue Code or the rules of the Nasdaq Stock Market, our board of directors may amend, modify or terminate any outstanding award under the 2013 Plan, 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 into a non-qualified stock option, subject to certain participant consent requirements. Unless our stockholders approve such action, the 2013 Plan provides that we may not (except as otherwise permitted in connection with a change in capitalization or reorganization event):

amend any outstanding stock option or stock appreciation right granted under the 2013 Plan to provide an exercise or measurement price per share that is lower than the then-current exercise or measurement price per share of such outstanding award;

cancel any outstanding option or stock appreciation right (whether or not granted under the 2013 Plan) and grant in substitution therefor new awards under the 2013 Plan (other than substitute awards permitted in connection with a merger or consolidation of an entity with us or our acquisition of property or stock of another entity) covering the same or a different number of shares of our common stock and having an exercise or measurement price per share lower than the then-current exercise or measurement price per share of the cancelled award;

cancel in exchange for a cash payment any outstanding option or stock appreciation right with an exercise or measurement price per share above the then-current fair market value of our common stock; or

take any other action that constitutes a repricing within the meaning of the rules of the Nasdaq Stock Market. No award may be granted under the 2013 Plan after October 21, 2023, but awards previously granted may extend beyond that date. Our board of directors may amend, suspend or terminate the 2013 Plan or any portion thereof at any time, subject to certain stockholder approval requirements and limitations under the Internal Revenue Code.

2013 Employee Stock Purchase Plan

Our board of directors adopted, and our stockholders approved, the 2013 Employee Stock Purchase Plan, or the 2013 ESPP. The 2013 ESPP is administered by our board of directors or by a committee appointed by our board of directors. The board of directors has delegated authority for administering the 2013 ESPP to our compensation committee. The 2013 ESPP provides participating employees with the opportunity to purchase shares of our common stock. As of March 15, 2019, 819,589 shares of our common stock are reserved for issuance under the 2013 ESPP. Additional shares of our common stock may also become available for issuance

- 47 -

Table of Contents

under the 2013 ESPP. The number of shares of our common stock reserved for issuance under the 2013 ESPP will automatically increase on the first day of each fiscal year through December 31, 2023, in an amount equal to the least of (1) 484,848 shares of our common stock, (2) 1% of the total number of shares of our common stock outstanding on the first day of the applicable year, and (3) an amount determined by our board of directors.

All of our employees and employees of any of our designated subsidiaries, as defined in the 2013 ESPP, are eligible to participate in the 2013 ESPP, provided that:

such person is customarily employed by us or a designated subsidiary for more than 20 hours a week and for more than five months in a calendar year;

such person has been employed by us or by a designated subsidiary for at least 30 days prior to enrolling in the 2013 ESPP; and

such person was our employee or an employee of a designated subsidiary on the first day of the applicable offering period under the 2013 ESPP.

No employee may purchase shares of our common stock under the 2013 ESPP and any of our other employee stock purchase plans in excess of \$25,000 of the fair market value of our common stock (as of the date of the option grant) in any calendar year. In addition, no employee may purchase shares of our common stock under the 2013 ESPP that would result in the employee owning 5% or more of the total combined voting power or value of our stock.

Each offering to our eligible employees to purchase stock under the 2013 ESPP will consist of a six-month offering period during which payroll deductions will be made and held for the purchase of our common stock at the end of the offering period. Our board of directors may, at its discretion, choose a different period of not more than 12 months for offerings. The first six-month offering period under the 2013 ESPP began on May 1, 2014 and subsequent offering periods occur over each successive six-month period thereafter until the board of directors determines otherwise.

On the commencement date of each offering period, each eligible employee may authorize up to a maximum of 15% of his or her compensation to be deducted by us during the offering period. Each employee who continues to be a participant in the 2013 ESPP on the last business day of the offering period will be deemed to have exercised an option to purchase from us the number of whole shares of our common stock that his or her accumulated payroll deductions on such date will pay for, not in excess of the maximum numbers set forth above. Under the terms of the 2013 ESPP, the purchase price shall be determined by our board of directors for each offering period and will be at least 85% of the applicable closing price of our common stock. If our board of directors does not make a determination of the purchase price, the purchase price will be 85% of the lesser of the closing price of our common stock on the first business day of the offering period or on the last business day of the offering period.

An employee may for any reason withdraw from participation in an offering prior to the end of an offering period and permanently draw out the balance accumulated in the employee's account. If an employee elects to discontinue his or her payroll deductions during an offering period but does not elect to withdraw his or her funds, funds previously deducted will be applied to the purchase of common stock at the end of the offering period. If a participating employee's employment ends before the last business day of an offering period, no additional payroll deductions will be made and the balance in the employee's account will be paid to the employee.

We will be required to make equitable adjustments to the number and class of securities available under the 2013 ESPP, the share limitations under the 2013 ESPP, and the purchase price for an offering period under the 2013 ESPP to reflect stock splits, reverse stock splits, stock dividends, recapitalizations, combinations of shares, reclassifications of shares, spin-offs and other similar changes in capitalization or events or any dividends or distributions to holders of our common stock other than ordinary cash dividends.

- 48 -

Table of Contents

In connection with a merger or other reorganization event (as defined in the 2013 ESPP), our board of directors or a committee of our board of directors may take any one or more of the following actions as to outstanding options to purchase shares of our common stock under the 2013 ESPP on such terms as our board or committee determines:

provide that options shall be assumed, or substantially equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof);

upon written notice to employees, provide that all outstanding options will be terminated immediately prior to the consummation of such reorganization event and that all such outstanding options will become exercisable to the extent of accumulated payroll deductions as of a date specified by our board or committee in such notice, which date shall not be less than ten days preceding the effective date of the reorganization event;

upon written notice to employees, provide that all outstanding options will be cancelled as of a date prior to the effective date of the reorganization event and that all accumulated payroll deductions will be returned to participating employees on such date;

in the event of a reorganization event under the terms of which holders of our common stock will receive upon consummation thereof a cash payment for each share surrendered in the reorganization event, change the last day of the offering period to be the date of the consummation of the reorganization event and make or provide for a cash payment to each employee equal to (1) the cash payment for each share surrendered in the reorganization event times the number of shares of our common stock that the employee's accumulated payroll deductions as of immediately prior to the reorganization event could purchase at the applicable purchase price, where the acquisition price is treated as the fair market value of our common stock on the last day of the applicable offering period for purposes of determining the purchase price and where the number of shares that could be purchased is subject to the applicable limitations under the 2013 ESPP minus (2) the result of multiplying such number of shares by the purchase price; and/or

provide that, in connection with our liquidation or dissolution, options shall convert into the right to receive liquidation proceeds (net of the purchase price thereof).

Our board of directors may at any time, and from time to time, amend or suspend the 2013 ESPP or any portion thereof. We will obtain stockholder approval for any amendment if such approval is required by Section 423 of the Internal Revenue Code. Further, our board of directors may not make any amendment that would cause the 2013 ESPP to fail to comply with Section 423 of the Internal Revenue Code. The 2013 ESPP may be terminated at any time by our board of directors. Upon termination, we will refund all amounts in the accounts of participating employees.

2010 Stock Incentive Plan

In July 2013, our board of directors adopted and our stockholders approved the 2010 Plan. The 2010 Plan provides for the grant of incentive stock options, nonstatutory stock options, restricted stock awards, restricted stock unit awards, and other stock-based awards. We no longer grant awards under the 2010 Plan, but awards remain outstanding under the 2010 Plan in accordance with their terms.

The 2010 Plan is administered by our board of directors. Pursuant to the terms of the 2010 Plan, our board of directors selected the recipients of awards and determined:

the number of shares of our common stock covered by options;

the terms, conditions and limitations applicable to the grant or exercise of options and to the common stock to be issued upon exercise of each option, including vesting provisions, repurchase provisions and restrictions upon sale or transfer thereof;

- 49 -

Table of Contents

the type of options to be granted;

the vesting and duration of options;

the exercise price of options; and

the number of shares of our common stock subject to and the terms and conditions of any restricted stock awards, restricted stock unit awards, or other stock-based awards, including conditions for repurchase (or forfeiture) and repurchase price.

To the extent permitted by applicable law, our board of directors may delegate its powers under the 2010 Plan to one or more committees or subcommittees of our board or to one or more of our executive officers.

In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination or reclassification of shares, spin-off or other similar change in capitalization or event, we are required by the 2010 Plan to make appropriate adjustments, in a manner determined by our board, to:

the number and class of securities available and the per-participant share limits under the 2010 Plan;

the number and class of securities, vesting schedule, and exercise price per share of each outstanding award;

the repurchase price per security subject to repurchase; and

the terms of each other outstanding stock-based award.

Upon the consummation of a merger or other event constituting an acquisition (as defined in the 2010 Plan), our board of directors or the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 2010 Plan (on the same basis or on different bases), either:

make appropriate provision for the continuation or assumption of such awards or substitute on an equitable basis for the shares then subject to such awards either (1) the consideration payable with respect to the outstanding shares of our common stock in connection with the acquisition, (2) shares of stock of the surviving or acquiring corporation, or (3) such other securities or other consideration as the applicable board deems appropriate, the fair market value of which shall not materially differ from the fair market value of the shares of our common stock subject to such awards immediately preceding the acquisition;

upon written notice, provide that one or more awards then outstanding must be exercised (to the extent then vested), in whole or in part, within a specified number of days of the date of such notice, at the end of which period such awards shall terminate; or

provide that one or more awards then outstanding, in whole or in part, shall be terminated in exchange for a cash payment equal to the excess of the fair market value (as determined by the applicable board in its sole discretion) for the vested shares subject to such awards over the exercise price, if any, thereof.

Unless otherwise determined by the applicable board of directors, any repurchase rights or other rights that relate to an award shall continue to apply to consideration, including cash that has been substituted, assumed or amended for an award in connection with an acquisition. We may require that all or any portion of such consideration payable in respect of an award in connection with an acquisition shall be held in escrow (including in an escrow pursuant to the agreement effecting such acquisition) in order to effectuate any continuing restrictions.

At any time, our board of directors may provide that any award under the 2010 Plan shall become immediately exercisable in full or in part or free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

Table of Contents

Our board of directors may amend, modify or terminate any outstanding award under the 2010 Plan, 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, subject to certain participant consent requirements. In addition, our board of directors may, without stockholder approval, amend any outstanding option to reduce the exercise price of such option or cancel any outstanding option and grant in substitution therefor new options covering the same or a different number of shares of our common stock and having a lower exercise price than the cancelled options. Our board of directors may amend, suspend or terminate the 2010 Plan or any portion thereof at any time.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Related Person Transactions

Since January 1, 2018, we have engaged in the following transactions with our directors and executive officers and holders of more than 5% of our voting securities and affiliates of our directors, executive officers and such 5% stockholders. We believe that all of the transactions described below were made on terms no less favorable to us than could have been obtained from unaffiliated third parties.

Severance and Change in Control Agreements

See the **Executive Compensation Employment Agreements, Severance and Change in Control Arrangements** section of this proxy statement for a further discussion of these arrangements.

Indemnification of Directors

Our certificate of incorporation limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law and provides that no director will have personal liability to us or to our stockholders for monetary damages for any breach of fiduciary duty as a director. In addition, we have entered into indemnification agreements with each of our directors that that require us, among other things, to indemnify each director for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors. See the **Corporate Governance Limitation of Liability and Indemnification** section of this proxy statement for a further discussion of these arrangements.

Consulting Arrangements

We are party to a consulting agreement with Mirza Consulting, an entity that is wholly owned by Dr. Mirza, a member of our board of directors. Pursuant to this agreement, we paid Dr. Mirza (through such entity) a consulting fee of \$9,500 per month from January 1, 2018 through December 31, 2018. Effective January 1, 2019, the consulting agreement with Mirza Consulting was amended to extend the term of the agreement until December 31, 2019 with a monthly fee of \$7,500.

The consulting fees described above for Dr. Mirza was approved by our compensation committee and our audit committee pursuant to the policies and procedures for the review of related party transactions, which are described below.

Policies and Procedures for Related Person Transactions

On October 8, 2013, our board of directors adopted written policies and procedures for the review of any transaction, arrangement or relationship in which we are a participant, the amount involved exceeds \$120,000, and one of our executive officers, directors, director nominees or 5% stockholders (or their immediate family members), each of whom we refer to as a related person, has a direct or indirect material interest.

Table of Contents

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a related person transaction, the related person must report the proposed related person transaction to our principal financial officer. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by the audit committee of our board of directors. Whenever practicable, the reporting, review, and approval will occur prior to effectiveness or consummation of the related person 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 audit committee meetings, subject to ratification by the audit committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

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

the related person's interest in the related person transaction;

the approximate dollar value of the amount involved in the related person transaction;

the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;

whether the transaction was undertaken in the ordinary course of our business;

whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;

the purpose of, and the potential benefits to us of, the transaction; and

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

The audit committee may approve or ratify the related person transaction only if the committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, our best interests. The 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 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 company receiving payment under the transaction; and

a transaction that is specifically contemplated by provisions of our certificate of incorporation or bylaws. The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by the compensation committee in the manner specified in its charter.

Table of Contents

PROPOSAL 2:

NON-BINDING ADVISORY VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

We are providing our stockholders the opportunity to vote to approve, on an advisory, non-binding basis, the compensation of our NEOs as disclosed in this proxy statement in accordance with the SEC's rules. This proposal, which is commonly referred to as "say-on-pay," is required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which added Section 14A to the Securities Exchange Act of 1934, or the Exchange Act.

We encourage stockholders to read closely the "Information About Executive Officer Compensation" section of this proxy statement beginning with the "Compensation Discussion and Analysis" on page 21, which describes in detail our executive compensation programs and the decisions made by our compensation committee and our board with respect to the fiscal year ended December 31, 2018.

As we describe in the "Compensation Discussion and Analysis," we maintain straight-forward executive compensation programs that consist almost entirely of base salary, an annual cash incentive bonus and annual equity awards. These elements of compensation have been selected by our compensation committee because the committee believes that they effectively achieve the fundamental goals of our compensation program, which are to attract, motivate and retain qualified and talented executives, who are critical to our success, motivating them to achieve our business goals and rewarding them for superior short- and long-term performance. The goal of our compensation committee is to ensure that our compensation programs are aligned with the interests of our stockholders and our business goals in order to attain our ultimate objective of increasing stockholder value. We believe that, consistent with these goals, the total compensation paid to each of our NEOs is fair, reasonable and competitive. Further, we believe our programs do not encourage excessive risk-taking by management.

We do not provide any compensation or benefit plans to executive officers that are not also available to other employees. We differentiate among executive officers primarily based on size of annual cash incentive awards and annual equity awards and, to a lesser extent, base salary. Annual compensation decisions for executive officers are made by our compensation committee and board of directors based on the achievement of specified corporate performance goals as described under "Compensation Discussion and Analysis."

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

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

As an advisory vote, this proposal is not binding. The outcome of this advisory vote does not overrule any decision by the company or the board of directors (or any committee thereof), create or imply any change to the fiduciary duties of the company or the board of directors (or any committee thereof), or create or imply any additional fiduciary duties for the company or the board of directors (or any committee thereof). However, our compensation committee and board of directors value the opinions expressed by our stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for named executive officers.

Recommendation of the Board of Directors

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

- 53 -

Table of Contents

PROPOSAL 3:

NON-BINDING ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

The Dodd-Frank Act and Section 14A of the Securities Exchange Act of 1934, as amended, also provide that stockholders must be given the opportunity to vote, on a non-binding advisory basis, for their preference as to how frequently we should hold future say-on-pay votes. We are asking our stockholders to cast a non-binding advisory vote regarding the frequency of future advisory votes on the compensation of our NEOs. Stockholders may vote for a frequency of every one, two or three years, or may abstain. Stockholders are not voting to approve or disapprove the recommendation of our board of directors. Stockholders may choose among the four choices available.

The vote on this proposal is advisory; therefore, it is not binding on the company, our board of directors or our compensation committee. We may determine in the future that it is in the best interests of the company and its stockholders to hold say-on-pay votes more or less frequently than the frequency indicated by stockholders in voting on this proposal or as currently recommended by our board of directors. However, we plan to consider the results of the vote on this proposal in determining the frequency of our say-on-pay votes because we value the opinions of our stockholders.

Currently, we believe that it is in the best interests of the company and its stockholders to hold a say-on-pay vote every one year, and this is the frequency recommended by our board of directors. We believe this frequency will enable our stockholders to vote, on a non-binding advisory basis, on our most recent executive compensation practices and decisions as presented in our annual proxy statements, which will lead to greater transparency and more meaningful and timely communication between the company and our stockholders regarding the compensation of our NEOs. Accordingly, we ask our stockholders to indicate their preferred voting frequency by voting for every one year, two years or three years (or abstaining from voting) in response to the following resolution:

RESOLVED, that the alternative of every one year, two years, or three years that receives the highest number of votes cast by stockholders in person or by proxy at this meeting will be deemed the preferred frequency with which the company is to hold an advisory vote on the compensation of the company's named executive officers.

Recommendation of the Board of Directors

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE, ON A NON-BINDING ADVISORY BASIS, FOR EVERY ONE YEAR AS THE PREFERRED FREQUENCY FOR THE ADVISORY VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.

PROPOSAL 4:

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The audit committee has selected Ernst & Young LLP as the company's independent registered public accounting firm for the fiscal year ending December 31, 2018, and the board of directors has directed that management submit the selection of the company's independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting, will have an opportunity to make a statement if they so desire, and be available to respond to appropriate questions.

Stockholder ratification of the selection of Ernst & Young LLP as the company's independent registered public accounting firm is not required by Delaware law or the company's certificate of incorporation or bylaws. However, the board is submitting the audit committee's selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the audit

Table of Contents

committee will reconsider whether to retain that firm. Even if the selection is ratified, the audit committee in its discretion may direct the selection of a different independent registered public accounting firm at any time during the year if the audit committee determines that such a change would be in the best interests of the company and its stockholders.

Independent Registered Public Accountant Fees

Ernst & Young LLP

| | Year Ended December 31, | |
|-----------------------|--------------------------------|-------------------|
| | 2018 | 2017 |
| Audit Fees(1) | \$ 1,300,000 | \$ 660,000 |
| Audit Related Fees(2) | | |
| Tax Fees(3) | 125,650 | 96,260 |
| All Other Fees(4) | | |
| Total | \$ 1,425,650 | \$ 756,260 |

(1) Audit Fees consist of fees billed for professional services performed by Ernst & Young LLP for the audit of our annual consolidated financial statements, the review of interim consolidated financial statements, and related services that are normally provided in connection with registration statements. Included in the 2017 and 2018 Audit Fees are fees billed in connection with our debt offerings, follow-on offerings and at-the-market offerings.

(2) Audit Related Fees may consist of fees billed by an independent registered public accounting firm for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements. There were no such fees in 2018 or 2017.

(3) Tax Fees consist of fees for professional services, including tax compliance, tax consulting, Internal Revenue Service Section 382 analysis, research and development tax credit analysis and tax advisory services performed by Ernst & Young LLP.

(4) There were no such fees incurred in 2018 or 2017.

The audit committee has considered the services listed above to be compatible with maintaining Ernst & Young LLP's independence.

Pre-Approval Policies and Procedures

Our audit committee has established a policy that all audit and permissible non-audit services provided by our independent registered public accounting firm will be pre-approved by the audit committee, and all such services were pre-approved in accordance with this policy during the fiscal years ended December 31, 2017 and 2018. These services may include audit services, audit-related services, tax services and other services. The audit committee considers whether the provision of each non-audit service is compatible with maintaining the independence of our auditors. Pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. Our independent registered public accounting firm and management are required to periodically report to the audit committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, and the fees for the services performed to date.

Recommendation of the Board of Directors

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE TO RATIFY THE SELECTION OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2019.

- 55 -

Table of Contents

PROPOSAL 5:

APPROVAL OF AN AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK

Background

Our authorized capital stock presently consists of 100,000,000 shares of common stock, \$0.0001 par value per share (common stock), and 5,000,000 shares of preferred stock, \$0.0001 par value per share (preferred stock). On February 15, 2019, our board of directors adopted, subject to stockholder approval, an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 100,000,000 to 200,000,000. The number of shares of preferred stock authorized for issuance would not be affected by the proposed amendment.

As of March 15, 2019, a total of 60,864,445 shares of common stock were issued and outstanding, no shares were held in treasury, and there were no shares of preferred stock issued or outstanding. As of March 15, 2019, there were 1,026,950 restricted stock units outstanding and options outstanding to purchase an aggregate of 8,633,185 shares of common stock under our equity incentive plans and an aggregate of 0, 1,411,002 and 819,589 shares of common stock reserved for future issuance under our 2010 Stock Incentive Plan, 2013 Stock Incentive Plan and 2013 Employee Stock Purchase Plan, respectively. Additionally, (i) an aggregate of 13,872,122 shares of common stock are reserved for issuance upon conversion of our outstanding 3.00% convertible senior notes due 2025, (ii) an aggregate of 3,825,000 shares of common stock are reserved for issuance upon the exercise of outstanding or to be granted inducement stock option awards and (iii) 6,250,000 shares of common stock are reserved for sale and issuance pursuant to an at the market offering under the Open Market Sale Agreement, dated August 17, 2018, with Jefferies LLC, as agent. Accordingly, out of the 100,000,000 shares of common stock presently authorized, 96,702,293 shares are issued or reserved for issuance and 3,297,707 authorized shares of common stock remain available for future issuance.

If stockholders approve the proposed amendment, the first sentence of Article Fourth of our Restated Certificate of Incorporation will be deleted in its entirety and replaced by the following:

FOURTH: The total number of shares of all classes of stock which the Corporation shall have the authority to issue is 205,000,000 shares, consisting of (i) 200,000,000 shares of Common Stock, \$0.0001 par value per share (Common Stock), and (ii) 5,000,000 shares of Preferred Stock, \$0.0001 par value per share (Preferred Stock).

The proposed amendment, if approved by our stockholders, would become effective upon the filing of an amendment to our Restated Certificate of Incorporation with the Secretary of State of the State of Delaware, in the form of Appendix A hereto, or at the later time set forth in such amendment. The board of directors reserves the right, notwithstanding stockholder approval and without further action by stockholders, to elect not to proceed with the proposed amendment if the board determines that the proposed amendment is no longer in our best interests and the best interests of our stockholders.

If our stockholders approve the proposed amendment, subject to the discretion of the board of directors, we intend to file the amendment to our Restated Certificate of Incorporation with the Secretary of State of the State of Delaware as soon as practicable after the Annual Meeting.

Reasons for the Proposed Increase

Over the past several years, we have used shares of our common stock to, among other things, engage in financings, incentivize and compensate employees and other service providers and for other general corporate

Table of Contents

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.

We do not currently have any specific plans, proposals or arrangements, written or oral, to issue any of the proposed additional authorized shares of common stock for general corporate or any other purposes. However, the board of directors believes that the availability of additional authorized shares of our common stock will afford us needed flexibility in acting upon financing transactions to strengthen our financial position and/or engaging in strategic activities without using cash. Unless required by applicable law or stock exchange rules, no further vote of the holders of common stock will be required with respect to any such transaction.

Potential Effects of the Proposed Increase

The additional shares of common stock for which authorization is sought would be identical in powers, privileges and rights to the shares of common stock that are now authorized. Holders of common stock do not have preemptive rights to subscribe to additional securities that we may issue.

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.

The board of directors has not proposed the increase in the amount of authorized shares with the intention of discouraging tender offers or takeover attempts. However, the availability of additional authorized shares for issuance may have the effect of discouraging a merger, tender offer, proxy contest or other attempt to obtain control.

Effectiveness of Amendment

If the proposed amendment is adopted, it will become effective upon the filing of a certificate of amendment to our Restated Certificate of Incorporation with the Secretary of State of the State of Delaware.

Recommendation of the Board of Directors

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL OF AN AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK.

- 57 -

Table of Contents**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table sets forth information relating to the beneficial ownership of our common stock as of March 15, 2019, by:

each person known by us to beneficially own more than 5% of our outstanding shares of common stock;

each of our directors;

each of our NEOs; and

all directors and executive officers as a group.

The percentage of shares beneficially owned is computed on the basis of 60,864,445 shares of our common stock outstanding as of March 15, 2019. The number of shares beneficially owned by each stockholder is determined under rules issued by the Securities and Exchange Commission and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options or other rights held by such person that are currently exercisable or will become exercisable within 60 days of March 15, 2019 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless otherwise indicated, the address of all listed stockholders is c/o Karyopharm Therapeutics Inc., 85 Wells Avenue, Newton, Massachusetts 02459. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

| Name of Beneficial Owner | Shares Beneficially Owned | |
|---|----------------------------------|-------------------|
| | Number | Percentage |
| 5% Stockholders | | |
| Wellington Management(1) | 8,216,781 | 13.50% |
| Chione Ltd.(2) | 6,000,000 | 9.86% |
| Consonance Capital(3) | 4,810,078 | 7.90% |
| Palo Alto Investors(4) | 4,685,352 | 7.70% |
| Blackrock(5) | 4,257,912 | 7.00% |
| Ridgeback Capital(6) | 3,945,200 | 6.48% |
| Point72(7) | 3,505,656 | 5.76% |
| Named Executive Officers and Directors | | |
| Michael G. Kauffman, M.D., Ph.D.(8) | 3,645,610 | 5.99% |
| Sharon Shacham, Ph.D., M.B.A.(9) | 3,645,610 | 5.99% |
| Christopher B. Primiano, J.D., M.B.A.(10) | 381,003 | * |

Edgar Filing: Karyopharm Therapeutics Inc. - Form DEF 14A

| | | |
|--|-----------|--------|
| Anand Varadan, M.B.A. | 24,733 | * |
| Michael Falvey, M.S.M(11) | 81,770 | * |
| Garen Bohlin(12) | 57,606 | * |
| Mikael Dolsten, M.D.(13) | 57,000 | * |
| J. Scott Garland(14) | 57,000 | * |
| Barry E. Greene(15) | 63,636 | * |
| Mansoor Raza Mirza, M.D.(16) | 84,463 | * |
| Deepika R. Pakianathan, Ph.D.(17) | 2,330,006 | 3.83% |
| All executive officers and directors as a group (12 persons)(18) | 7,078,763 | 11.63% |

* Less than 1%.

Table of Contents

- (1) Wellington Management Group LLP (Wellington) reports shared voting power with respect to 7,483,307 shares, and shared dispositive power with respect to 8,216,781 shares. Wellington Group Holdings LLP reports shared voting power with respect to 7,483,307 shares, and shared dispositive power with respect to 8,216,781 shares. Wellington Investment Advisors Holdings LLP reports shared voting power with respect to 7,483,307 shares, and shared dispositive power with respect to 8,216,781 shares. Wellington Management Company LLP reports shared voting power with respect to 7,372,646 shares, and shared dispositive power with respect to 7,671,620 shares. The securities reported, as filed by Wellington, as parent holding company of certain holding companies and the Wellington Investment Advisers, are owned of record by clients of the Wellington Investment Advisers. Wellington Investment Advisors Holdings LLP controls directly, or indirectly through Wellington Management Global Holdings, Ltd., the Wellington Investment Advisers. Wellington Investment Advisors Holdings LLP is owned by Wellington Group Holdings LLP. Wellington Group Holdings LLP is owned by Wellington Management Group LLP. The address of Wellington is 280 Congress Street, Boston, MA 02210. For information regarding Wellington, we have relied on Amendment No. 3 to Schedule 13G filed by Wellington with the SEC on February 12, 2019.
- (2) Consists of shares of common stock owned directly by Chione Ltd. The board of directors of Chione, comprised of Marcin Czernik, Andreas Hadjimichael and George Hadjimichael, and its sole stockholder, Wlaczslaw Smolokowski, may be deemed to share voting and investment power and beneficial ownership of such shares of Common Stock. Each of such directors and stockholder disclaims such voting and investment power and beneficial ownership. The shares held by Chione Ltd. do not include any shares held by Plio Limited, which has the same directors as Chione Ltd. and as to which each of such directors may be deemed to share voting and investment power and beneficial ownership. Each of such directors disclaims such voting and investment power and beneficial ownership with respect to shares held by Plio Limited. The address for Chione Ltd. is Simou Menardou 5, Kifisia Court, 2nd Floor, Flat/Office 225, 6015 Larnaca, Cyprus. The address for Mr. Smolokowski is Chalet Lenotchka, Chemin des Marais 1, Chesieres, Switzerland. For information regarding Chione Ltd. and its affiliates, we have relied on Amendment No. 4 to Schedule 13G filed by Chione Ltd. with the SEC on February 13, 2019 and Form 4 for Chione Ltd. filed March 4, 2019.
- (3) Consonance Capital Management LP (Consonance) reports shared voting power and shared dispositive power with respect to 4,691,579 shares. Consonance Capital Opportunity Fund Management LP reports shared voting power and shared dispositive power with respect to 118,499 shares. Mitchell Blutt and Consonance Capman GP LLC each reports shared voting power and shared dispositive power with respect to 4,810,078 shares. The address for Consonance is 1370 Avenue of the Americas, Floor 33, New York, NY 10019. For information regarding Consonance, we have relied on Schedule 13G filed by Consonance on February 14, 2019.
- (4) Palo Alto Investors, LP (PAI) is a registered investment adviser and investment adviser of Palo Alto Healthcare Master Fund II, L.P. (Healthcare Master II) and other investment limited partnerships and is the investment adviser to other investment funds. PAI LLC is the general partner of investment limited partnerships. PAI s clients have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares held by PAI. No individual client, outside of Healthcare Master II separately holds more than five percent of the outstanding shares held by PAI. Patrick Lee, MD and Anthony Joonkyoo Yun, MD co-manage PAI. Dr. Lee reports shared voting power and shared dispositive power with respect to 4,685,352 shares. PAI LLC reports shared voting power and shared dispositive power with respect to 4,685,352 shares. Dr. Yun reports shared voting power and shared dispositive power with respect to 4,685,352 shares. PAI reports shared voting power and shared dispositive power with respect to 4,685,352 shares. Healthcare Master II reports shared voting power and shared dispositive power with respect to 3,033,206 shares. Each of PAI, Dr. Lee, Dr. Yun and Healthcare Master II disclaims beneficial ownership of the shares held by PAI except to the extent of each party s pecuniary interest therein. The address for PAI is 470 University Avenue, Palo Alto, CA 94301. For information regarding PAI and its affiliates, we have relied on Amendment No. 3 to Schedule 13G filed by PAI with the SEC on February 14, 2019.

- (5) Consists of shares of common stock owned directly by BlackRock, Inc. (Blackrock). Blackrock has sole voting power with respect to 4,142,774 shares and sole dispositive power with respect to 4,257,912 shares.

- 59 -

Table of Contents

- The address for Blackrock is 55 East 52nd Street, New York, NY 10055. For information regarding Blackrock, we have relied on Amendment No. 1 to Schedule 13G filed by Blackrock with the SEC on February 6, 2019.
- (6) Ridgeback Capital Investments L.P. (RCILP), Ridgeback Capital Investments Ltd. (RCI) and Ridgeback Capital Management LP (RCM) each report shared voting power and shared dispositive power with respect to 3,945,200 shares. RCM and RCI do not own any shares directly. RCI is the general partner of RCILP. Pursuant to an investment management agreement, RCM maintains investment and voting power with respect to the securities held or controlled by RCI. Wayne Holman, an individual, controls RCM. RCM and RCI may be deemed to own beneficially all of the shares. Each of RCM and RCI disclaim beneficial ownership of any of the securities covered by this statement, except to the extent of any pecuniary interest therein. The address for each of RCILP, RCI and RCM (collectively, Ridgeback Capital) is 500 South Pointe Drive, Suite 220, Miami Beach, Florida 33139. For information regarding Ridgeback Capital, we have relied on Amendment No. 1 to Schedule 13G filed by Ridgeback Capital with the SEC on February 14, 2019.
- (7) Point72 Asset Management, LP (Point72 AM), Point72 Capital Advisors Inc. (Point72 CA), Cubist Systematic Strategies (CSS), Point72 Asia (Hong Kong) (Point72 HK), and Mr. Steven A. Cohen own directly no shares. Pursuant to an investment management agreement, Point72 AM maintains investment and voting power with respect to the securities held by certain investment funds it manages. Point72 CA is the general partner of Point72 AM. Pursuant to an investment management agreement, CSS maintains investment and voting power with respect to the securities held by certain investment funds it manages. Pursuant to an investment management agreement, Point72 HK maintains investment and voting power with respect to the securities held by certain investment funds it manages. Mr. Cohen controls each of Point72 AM, Point72 CA, CSS, and Point72 HK (collectively, Point72). Point 72 AM reports shared voting power and shared dispositive power with respect to 3,408,141 shares. Point72 CA reports shared voting power and shared dispositive power with respect to 3,408,141 shares. CSS reports shared voting power and shared dispositive power with respect to 97,396 shares. Point72 HK reports shared voting power and shared dispositive power with respect to 119 shares. Steven A. Cohen reports shared voting power and shared dispositive power with respect to 3,505,656 shares. The address for (i) Point72 AM, Point72 CA., and Mr. Cohen is 72 Cummings Point Road, Stamford, CT 06902; (ii) CSS is 330 Madison Avenue, New York, NY 10173; and (iii) Point72 HK is 12th Floor, Chater House, 8 Connaught Central, Hong Kong. For information regarding these entities, we have relied on Schedule 13G filed by Point 72 with the SEC on February 27, 2019.
- (8) Consists of (a) 1,117,310 shares of common stock underlying options held by Dr. Kauffman that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date, (b) 529,767 shares of common stock held by Dr. Kauffman, (c) 29,685 shares of common stock held by Dr. Kauffman as trustee of his qualified annuity interest trust (d) 1,208,029 shares of common stock underlying options held by Dr. Shacham, who is the spouse of Dr. Kauffman, that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date, (e) 731,134 shares of common stock held by Dr. Shacham and (f) 29,685 shares of common stock held by Dr. Shacham as trustee of her qualified annuity interest trust.
- (9) Consists of (a) 1,208,029 shares of common stock underlying options held by Dr. Shacham that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date, (b) 731,134 shares of common stock held by Dr. Shacham, (c) 29,685 shares of common stock held by Dr. Shacham as trustee of her qualified annuity interest trust (d) 1,117,310 shares of common stock underlying options held by Dr. Kauffman, who is the spouse of Dr. Shacham, that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date, (e) 529,767 shares of common stock held by Dr. Kauffman and (f) 29,685 shares of common stock held by Dr. Kauffman as trustee of his qualified annuity trust.
- (10) Consists of (a) 2,881 shares of common stock and (b) 378,122 shares of common stock underlying options that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.
- (11) Consists of 81,770 shares of common stock underlying options that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.

Table of Contents

- (12) Consists of 57,606 shares of common stock underlying options that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.
- (13) Consists of 57,000 shares of common stock underlying options that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.
- (14) Consists of 57,000 shares of common stock underlying options that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.
- (15) Consists of (a) 3,000 shares of common stock and (b) 60,636 shares of common stock underlying options that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.
- (16) Consists of (a) 72,342 shares of common stock underlying options held by Dr. Mirza that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date and (b) 12,121 shares of common stock underlying options held by Mirza Consulting, a Danish company wholly-owned by Dr. Mirza, that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.
- (17) Consists of (a) 67,000 shares of common stock underlying options held by Deepika R. Pakianathan that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date, (b) 2,241,123 shares of common stock held by Delphi Ventures VIII, L.P. (Delphi VIII) and (c) 21,883 shares of common stock held by Delphi BioInvestments VIII, L.P. (DBI VIII). Delphi Management Partners VIII, L.L.C (DMP VIII) is the general partner of Delphi VIII and DBI VIII (together, the Delphi VIII Funds) and may be deemed to have sole voting and dispositive power over the shares held by the Delphi VIII Funds. DMP VIII and each of James J. Bochnowski, David L. Douglass, Douglas A. Roeder and Deepika R. Pakianathan, Ph.D., the Managing Members of DMP VIII who may be deemed to share voting and dispositive power over the reported securities, disclaim beneficial ownership of the reported securities held by Delphi VIII Funds except to the extent of any pecuniary interest therein.
- (18) Includes 3,464,872 shares of common stock underlying options that are exercisable as of March 15, 2019 or will become exercisable within 60 days after such date.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Under Section 16(a) of the Exchange Act, directors, executive officers and beneficial owners of 10% or more of our common stock, or reporting persons, are required to report to the SEC on a timely basis the initiation of their status as a reporting person and any changes with respect to their beneficial ownership of our common stock. Based solely on our review of copies of forms that we have received, or written representations from reporting persons, we believe that during the fiscal year ended December 31, 2018, all executive officers, directors and greater than 10% stockholders timely complied with all applicable filing requirements.

Table of Contents**SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS**

The following table contains information about our equity compensation plans as of December 31, 2018. As of December 31, 2018, we had three equity compensation plans, each of which was approved by our stockholders: the 2010 Plan, the 2013 Plan and the 2013 ESPP.

Equity Compensation Plan Information

| Plan Category | Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a) | Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b) | Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a))(1) (c) |
|---|--|--|---|
| Equity compensation plans approved by security holders | 7,270,684 | \$ 13.70 | 2,201,437 |
| Equity compensation plans not approved by security holders(2) | 1,646,400 | \$ 14.15 | |
| Total | 8,917,084 | \$ 13.78 | 2,201,437 |

- (1) As of December 31, 2018, there were 1,866,696 shares available for future issuance of stock, option and other awards under the 2013 Plan, and 334,741 shares available for future issuance under the 2013 ESPP.
- (2) Consists of shares of common stock issuable upon exercise of outstanding stock options granted pursuant to the Nasdaq inducement grant exception as a component of employment compensation for employees. The inducement grants were approved by our compensation committee and were made as an inducement material to employees entering into employment with us in accordance with Nasdaq Listing Rule 5635(c)(4).

STOCKHOLDER PROPOSALS

Proposals of stockholders intended to be presented at our annual meeting of stockholders to be held in 2020 must be received by us no later than December 21, 2019, which is 120 calendar days prior to the one-year anniversary of the date on which our proxy statement was released to stockholders in connection with this year's annual meeting of stockholders, in order to be included in our proxy statement and form of proxy relating to the 2019 annual meeting of stockholders, unless the date of the 2020 annual meeting of stockholders is changed by more than 30 days from the anniversary of our 2019 Annual Meeting, in which case the deadline for such proposals will be a reasonable time before we begin to print and send our proxy materials. These proposals must comply with the requirements as to form and substance established by the SEC for such proposals in order to be included in the proxy statement.

In addition, our bylaws establish an advance notice procedure for nominations for election to our board of directors and other matters that stockholders wish to present for action at an annual meeting other than those to be included in

our proxy statement. In general, notice must be received at our principal executive offices not less than 90 calendar days before nor more than 120 calendar days before the one-year anniversary of the previous year's annual meeting of stockholders. Therefore, to be presented at our 2020 annual meeting of stockholders, such a proposal must be received by us no earlier than February 7, 2020 and no later than March 8, 2020. However, if the date of the 2020 annual meeting of stockholders is more than 20 days earlier or more than 60 days later than such anniversary date, notice must be received no earlier than the close of business 120 calendar days prior to such annual meeting and no later than the close of business on the later of (i) 90 days prior to such annual meeting and (ii) 10 days following the day on which notice of the date of such annual meeting was mailed or public announcement of the date of such annual meeting was first made, whichever first occurs. Any proposals we do not

Table of Contents

receive in accordance with the above standards will not be voted on at the 2020 annual meeting of stockholders. Stockholders are advised to review our bylaws which also specify requirements as to the form and content of a stockholder's notice.

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

Karyopharm Therapeutics Inc.

85 Wells Avenue

Newton, Massachusetts 02459

Attention: Corporate Secretary

STOCKHOLDERS SHARING THE SAME ADDRESS

The rules promulgated by the SEC permit companies, banks, brokerage firms or other intermediaries to deliver a single copy of a proxy statement and annual report to households at which two or more stockholders reside. This practice, known as "householding," is designed to reduce duplicate mailings and save significant printing and postage costs as well as natural resources. Stockholders sharing an address who have been previously notified by their bank, brokerage firm or other intermediary and have consented to householding will receive only one copy of our proxy statement and annual report. If you would like to opt out of this practice for future mailings and receive separate proxy statements and annual reports for each stockholder sharing the same address, please contact your bank, brokerage firm or other intermediary from whom you received such mailing. We will promptly deliver a separate copy of the proxy statement and/or annual report to you if you contact us at the following address or telephone number: Karyopharm Therapeutics Inc., 85 Wells Avenue, Newton, Massachusetts 02459, Attention: Corporate Secretary, (617) 658-0600. We will promptly send additional copies of the proxy statement or annual report upon receipt of such request. Stockholders sharing an address that are receiving multiple copies of the proxy statement or annual report can request delivery of a single copy of the proxy statement or annual report by contacting their bank, brokerage firm or other intermediary or by contacting us at the address or telephone number above.

OTHER MATTERS

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

DIRECTIONS TO ANNUAL MEETING

Directions to the 2019 Annual Meeting of Stockholders, to be held at our headquarters, 85 Wells Avenue, Newton, Massachusetts 02459, are set forth below.

From the North, West and East:

Route 95 South to Exit 19A, Turn left onto Kendrick Street. Kendrick Street becomes Nahanton Street. Turn right onto Wells Avenue. 85 Wells Avenue is on the right.

From the South:

Route 95 North to Exit 19A. Turn right onto Kendrick Street. Kendrick Street becomes Nahanton Street. Turn right onto Wells Avenue. 85 Wells Avenue is on the right.

- 63 -

**CERTIFICATE OF AMENDMENT OF
RESTATED CERTIFICATE OF INCORPORATION
OF
KARYOPHARM THERAPEUTICS INC.**

(Pursuant to Section 242 of the
General Corporation Law of the State of Delaware)

Karyopharm Therapeutics 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, does hereby certify as follows:

A resolution was duly adopted by the Board of Directors of the Corporation pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth a proposed amendment to the Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The resolution setting forth the amendment is as follows:

RESOLVED: That the first sentence of Article FOURTH of the Restated Certificate of Incorporation of the Corporation be and hereby is deleted in its entirety and the following is inserted in lieu thereof:
FOURTH: The total number of shares of all classes of stock which the Corporation shall have the authority to issue is 205,000,000 shares, consisting of (i) 200,000,000 shares of Common Stock, \$0.0001 par value per share (Common Stock), and (ii) 5,000,000 shares of Preferred Stock, \$0.0001 par value per share (Preferred Stock).

A-1

Table of Contents

IN WITNESS WHEREOF, this Certificate of Amendment has been executed by a duly authorized officer of the Corporation on this day of , 2019.

KARYOPHARM THERAPEUTICS Inc.

By:
Michael Kauffman, M.D., Ph.D.

Chief Executive Officer

A-2

Table of Contents

VOTE BY INTERNET - www.proxyvote.com

KARYOPHARM THERAPEUTICS INC.

C/O PROXY SERVICES

P.O. BOX 9142

FARMINGDALE, NY 11735

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time the day before the meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time the day before the meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

E73055-P20618

KEEP THIS PORTION FOR YOUR RECORDS

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

M THERAPEUTICS INC.

For All **Withhold All** **For All Except**

Directors recommends you vote FOR the of the director nominees.

To withhold authority to vote for any individual nominee(s), mark **For All Except** and write the number(s) of the nominee(s) on the line below.

at the following three Class III Director

nominees:

Garen G. Bohlin
Mikael Dolsten, M.D., Ph.D.

Michael G. Kauffman, M.D., Ph.D.

The Board of Directors recommends you For Against Abstain
vote FOR the following proposal.

of Directors recommends you vote For Against Abstain
following proposal.

4. To ratify the selection of Ernst & Young LLP as Karyopharm's independent registered public accounting firm for the fiscal year ending December 31, 2019.

approve, on a non-binding advisory basis, the re-election of Karyopharm's named officers.

1 Year 2 Years 3 Years Abstain

For Against Abstain

of Directors recommends you vote FOR on the following proposal.

commend, on a non-binding advisory frequency of future advisory votes on nomination of Karyopharm's named officers.

The Board of Directors recommends you vote FOR the following proposal.

5. To approve an amendment to Karyopharm's Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 100,000,000 to 200,000,000.

In their discretion, the proxies are authorized to vote upon such other matters as may be properly brought before the meeting or any adjournment thereof.

changes and/or comments, please check this area on the back where indicated.

ate if you plan to attend this meeting.

Yes No

your name exactly as it appears hereon. When signing as attorney, executor, trustee or guardian, please add your title as such. When signing as joint parties in the joint tenancy must sign. If a signer is a corporation, please sign as corporation or partnership name by authorized officer.

PLEASE SIGN WITHIN BOX]

Date

Signature (Joint Owners)

Date

Table of Contents

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:

The Notice and Proxy Statement and Annual Report on Form 10-K are available at www.proxyvote.com.

E73056-P20618

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

ANNUAL MEETING OF STOCKHOLDERS

JUNE 6, 2019

The stockholder(s) hereby appoint(s) Christopher B. Primiano and Michael Mason, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of KARYOPHARM THERAPEUTICS INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 8:00 AM, Eastern Time on June 6, 2019, at 85 Wells Avenue, Newton, MA 02459, and any adjournment or postponement thereof.

THE UNDERSIGNED HEREBY REVOKES ANY PROXY PREVIOUSLY GIVEN WITH RESPECT TO THE ANNUAL MEETING AND ACKNOWLEDGES RECEIPT OF THE NOTICE AND PROXY STATEMENT FOR THE ANNUAL MEETING.

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED BY THE STOCKHOLDER(S). IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE DIRECTOR NOMINEES LISTED ON THE REVERSE SIDE FOR THE BOARD OF DIRECTORS, FOR PROPOSALS 2, 4 AND 5 AND 1 YEAR ON PROPOSAL 3 AND, IN THE DISCRETION OF THE PROXIES, ON SUCH OTHER BUSINESS AS MAY

PROPERLY COME BEFORE THE MEETING OR ANY ADJOURNMENT OR POSTPONEMENT THEREOF.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE

Address Changes/Comments:

(If you noted any Address Changes/Comments above, please mark corresponding box on the reverse side.)

CONTINUED AND TO BE SIGNED ON REVERSE SIDE