ACCELERON PHARMA INC
Form DEF 14A
April 13, 2018
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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 ý

Filed by a Party other than the Registrant o

Check the appropriate box:

o Preliminary Proxy Statement

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

ý Definitive Proxy Statement

o Definitive Additional Materials

o Soliciting Material under §240.14a-12

ACCELERON PHARMA 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):
ý No fee required.
o 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:

o Fee paid previously with preliminary materials.
o 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:

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Acceleron Pharma Inc.
128 Sidney Street
Cambridge, MA 02139

NOTICE OF 2018 ANNUAL MEETING OF STOCKHOLDERS

The 2018 Annual Meeting of Stockholders of Acceleron Pharma Inc. (the "Company" or "Acceleron") will be held on June 6, 2018, at 8:30 a.m. local time, at Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, MA 02199, for the purpose of considering the following three company-sponsored proposals:

1. To elect Habib J. Dable, Terrence C. Kearney, and Karen L. Smith, M.D., Ph.D. as Class II directors, each for a three-year term.
2. To approve, on an advisory basis, the compensation paid to our named executive officers as described in this proxy statement.
3. To ratify the selection of Ernst & Young LLP as the independent registered public accounting firm for the Company for the fiscal year ending December 31, 2018.

We will also consider and act upon any other matters that properly come before the Annual Meeting or any adjournment or postponement thereof.

Our Board of Directors recommends that you vote "for" each of the nominees for Class II director (proposal no. 1), "for" approval, on an advisory basis, of the compensation paid to our named executive officers as described in this proxy statement (proposal no. 2), and "for" ratification of the proposed independent registered public accounting firm (proposal no. 3).

Each outstanding share of the Company's common stock (NASDAQ: XLRN) entitles the holder of record at the close of business on April 9, 2018, to receive notice of and to vote at the Annual Meeting or any adjournment or postponement of the Annual Meeting.

Whether or not you expect to attend the meeting, we urge you to vote your shares by following the instructions in the Important Notice Regarding the Availability of Proxy Materials that you received by mail and submit your proxy by the Internet, telephone or by signing, dating and returning the proxy card included in these materials in order to ensure the presence of a quorum. If you choose to attend the Annual Meeting, you may still vote your shares in person, even if you have previously voted or returned your proxy by any of the methods described in our proxy statement. If your shares are held in a bank or brokerage account, please refer to the materials provided by your bank or broker for voting instructions.

All stockholders are extended a cordial invitation to attend the meeting.

By Order of the Board of Directors

Habib J. Dable
Chief Executive Officer, President and Director
April 13, 2018

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Acceleron Pharma Inc.
128 Sidney Street
Cambridge, MA 02139

PROXY STATEMENT FOR 2018 ANNUAL MEETING OF STOCKHOLDERS
To Be Held On Wednesday, June 6, 2018 at 8:30 am ET
This proxy statement, along with the accompanying Notice of 2018 Annual Meeting of Stockholders, contains information about the 2018 Annual Meeting of Stockholders of Acceleron Pharma Inc., which we refer to as the Annual Meeting, including any adjournments or postponements of the Annual Meeting. We are holding the Annual Meeting at 8:30 a.m. local time, at Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, MA 02199.
In this proxy statement, we refer to Acceleron Pharma Inc. as "Acceleron," "the Company," "we" and "us."
This proxy statement relates to the solicitation of proxies by our Board of Directors for use at the Annual Meeting.

On or about April 13, 2018, we made available this proxy statement and the attached Notice of 2018 Annual Meeting of Stockholders to all stockholders entitled to vote at the Annual Meeting, and we began sending the proxy card and the Important Notice Regarding the Availability of Proxy Materials to all stockholders entitled to vote at the Annual Meeting. Although not part of this proxy statement, we have also made available with this proxy statement our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 (the “Annual Report”), which includes our financial statements for the fiscal year ended December 31, 2017.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON JUNE 6, 2018

This proxy statement and our Annual Report are available for viewing, printing and downloading at www.proxyvote.com. To view these materials, please have your 16-digit control number(s) available that appears on your proxy card.

Additionally, you can find a copy of our Annual Report on the website of the Securities and Exchange Commission, or the SEC, at www.sec.gov, or in the “Annual Meeting” tab of the “Investors/Media” section of our website at www.acceleronpharma.com. You may also obtain a printed copy of our Annual Report, free of charge, by sending a written request to: Acceleron Pharma Inc., 128 Sidney Street, Cambridge, MA 02139, Attention: Secretary. Exhibits, if any, will be provided upon written request and payment of an appropriate processing fee.

IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Why is the Company soliciting my proxy?

The Board of Directors of Acceleron Pharma Inc. is soliciting your proxy to vote at the 2018 Annual Meeting of Stockholders to be held at 8:30 a.m. local time on June 6, 2018, at Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, MA 02199, and any adjournments of the meeting, which we refer to as the Annual Meeting. The proxy statement along with the accompanying Notice of 2018 Annual Meeting of Stockholders summarizes the purposes of the meeting and the information you need to know to vote at the Annual Meeting.

We have made available to you on the Internet or have sent you this proxy statement, the Notice of 2018 Annual Meeting of Stockholders, the proxy card and a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 because you owned shares of Acceleron Pharma Inc. common stock on the record date.

When were this proxy statement and the accompanying materials sent to stockholders?

On or about April 13, 2018, we began sending the Important Notice Regarding the Availability of Proxy Materials to all stockholders entitled to vote at the Annual Meeting.

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When is the record date for the Annual Meeting?

The Company's Board of Directors has fixed the record date for the Annual Meeting as of the close of business on April 9, 2018. Only stockholders who owned our common stock at the close of business on April 9, 2018 are entitled to vote at the Annual Meeting.

How many votes can be cast by all stockholders?

A total of 45,765,325 shares of common stock of the Company were outstanding on April 9, 2018 and are entitled to be voted at the meeting. Each share of common stock is entitled to one vote on each matter.

How do I vote?

If you are a stockholder of record and your shares are registered directly in your name, you may vote:

- By Internet. You may vote by proxy via the Internet at www.proxyvote.com by following the instructions provided on the Important Notice Regarding the Availability of Proxy Materials or the proxy card.
- By Telephone. If you live in the United States or Canada, you may vote by proxy by calling toll-free 1-800-690-6903 and by following the instructions provided on the proxy card. You must have the 16-digit control number that is on either the notice or the proxy card when voting.
- By Mail. Complete and mail your proxy card in the postage prepaid envelope you receive, and return the proxy card to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717. Your proxy will be voted in accordance with your instructions. If you sign and return the enclosed proxy but do not specify how you want your shares voted, they will be voted as recommended by our Board of Directors and according to the discretion of the proxy holder named in the proxy card upon any other business that may properly be brought before the meeting and at all adjournments and postponements thereof.
- In Person at the Meeting. If you attend the meeting, be sure to bring a form of personal picture identification with you, and you may deliver your completed proxy card in person, or you may vote by completing a ballot, which will be available at the meeting.

If your shares of common stock are held in street name (held for your account by a broker or other nominee):

- By Internet or By Telephone. You will receive instructions from your broker or other nominee if you are permitted to vote by Internet or telephone.
- By Mail. You will receive instructions from your broker or other nominee explaining how to vote your shares.
- In Person at the Meeting. If you attend the meeting, in addition to picture identification, you should both bring an account statement or a letter from the record holder indicating that you owned the shares as of the record date, and contact the broker or other nominee who holds your shares to obtain a broker's proxy card and bring it with you to the meeting.

What are the Board's recommendations on how to vote my shares?

The Board of Directors recommends a vote:

Proposal 1:	FOR election of Habib J. Dable, Terrence C. Kearney, and Karen L. Smith, M.D., Ph.D. as Class II directors.
Proposal 2:	FOR approval, on an advisory basis, of the compensation paid to our named executive officers as described in this proxy statement.
Proposal 3:	FOR ratification of selection of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2018.

Who pays the cost for soliciting proxies?

Acceleron will bear the cost of solicitation of proxies. This includes the charges and expenses of brokerage firms and others for forwarding solicitation material to beneficial owners of our outstanding common stock. Acceleron may solicit proxies by mail, personal interview, telephone or via the Internet through its officers, directors and other management employees, who will receive no additional compensation for their services.

Can I change my vote?

You may revoke your proxy at any time before it is voted by notifying the Secretary in writing, by returning a signed proxy with a later date, by transmitting a subsequent vote over the Internet or by telephone prior to the close of the Internet voting

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facility or the telephone voting facility, or by attending the meeting and voting in person. If your stock is held in street name, you must contact your broker or nominee for instructions as to how to change your vote.

How is a quorum reached?

The presence, in person or by proxy, of holders of at least a majority of the total number of outstanding shares entitled to vote is necessary to constitute a quorum for the transaction of business at the Annual Meeting. Abstentions and "broker non-votes" (i.e., shares represented at the meeting held by brokers, bankers or other nominees as to which instructions have not been received from the beneficial owners or persons entitled to vote such shares and, with respect to one or more but not all issues, such brokers or nominees do not have discretionary voting power to vote such shares), if any, will be counted for purposes of determining whether a quorum is present for the transaction of business at the meeting.

What vote is required to approve each item?

Proposal 1: Elect Directors	For the election of the three Class II director nominees, each director nominee presented must be elected by a majority of the votes cast. Director nominees are elected by a majority vote for uncontested director elections, and because the number of director nominees properly nominated does not exceed the number of positions on the Board of Directors to be filled by election, this election of directors is uncontested. To elect a director nominee to the Board of Directors, the votes cast FOR the director nominee must exceed the votes cast AGAINST. Only FOR and AGAINST votes will affect the outcome. Abstentions will have no effect on this Proposal 1. Proposal 1 is a non-routine matter. Therefore, brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name for the election of directors. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.
Proposal 2: Approve, on an Advisory Basis, the Compensation Paid to Our Named Executive Officers	For the advisory vote on executive compensation, the votes cast FOR must exceed the votes cast AGAINST to approve, on an advisory basis, the compensation of our named executive officers as described in this proxy statement. Only FOR and AGAINST votes will affect the outcome. Abstentions will have no effect on the voting of Proposal 2. Proposal 2 is a non-routine matter. Therefore, brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name on this proposal. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote. Although the advisory vote is non-binding, the Compensation Committee and the Board of Directors will review the voting results and consider them when making future decisions regarding executive compensation.
Proposal 3: Ratify Selection of our Independent Registered Public Accounting Firm	For the ratification of the selection of our independent registered public accounting firm for our 2018 fiscal year, the votes cast FOR must exceed the votes cast AGAINST. Only FOR and AGAINST votes will affect the outcome. Abstentions will have no effect on the results of this vote. Proposal 3 is a routine matter. Therefore, brokerage firms have authority to vote customers' unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker non-votes will have no effect on the results of this vote. We are not required to obtain the approval of our stockholders to select our independent registered public accounting firm. However, if our stockholders do not ratify the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018, the Audit Committee of the Board of Directors will reconsider its selection.

If there are insufficient votes to approve these proposals, your proxy may be voted by the persons named in the proxy card to adjourn the Annual Meeting in order to solicit additional proxies in favor of the approval of such proposal(s). If the Annual Meeting is adjourned or postponed for any purpose, at any subsequent reconvening of the meeting, your

proxy will be voted in the same manner as it would have been voted at the original convening of the Annual Meeting unless you withdraw or revoke your proxy.

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Could other matters be decided at the Annual Meeting?

We do not know of any other matters that may be presented for action at the Annual Meeting. Should any other business come before the meeting, the persons named on the enclosed proxy will have discretionary authority to vote the shares represented by such proxies in accordance with their best judgment. If you hold shares through a broker, bank or other nominee as described above, they will not be able to vote your shares on any other business that comes before the Annual Meeting unless they receive instructions from you with respect to such matter.

What happens if the meeting is postponed or adjourned?

Your proxy may be voted at the postponed or adjourned meeting. You will still be able to change your proxy until it is voted.

What does it mean if I receive more than one proxy card or voting instruction form?

It means that you have multiple accounts at the transfer agent or with brokers. Please complete and return all proxy cards or voting instruction forms to ensure that all of your shares are voted.

Who should I call if I have any additional questions?

If you hold your shares directly, please call John Quisel, Secretary of the Company, at (617) 649-9200. If your shares are held in street name, please contact the telephone number provided on your voting instruction form or contact your broker or nominee holder directly.

Electronic Delivery of Company Stockholder Communications

Most stockholders can elect to view future proxy materials and annual reports over the Internet instead of receiving paper copies in the mail. You can choose this option and save us the cost of producing and mailing these documents by following the instructions provided when you vote over the Internet.

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of March 31, 2018 (unless otherwise specified), with respect to the beneficial ownership of our common stock by each person who is known to own beneficially more than 5% of the outstanding shares of common stock, each person currently serving as a director, each nominee for director, each named executive officer (as set forth in the Summary Compensation Table below), and all directors and executive officers as a group.

Shares of common stock subject to options, restricted stock units or other rights to purchase which are now exercisable or are exercisable within 60 days after March 31, 2018 are to be considered outstanding for purposes of computing the percentage ownership of the persons holding these options or other rights but are not to be considered outstanding for the purpose of computing the percentage ownership of any other person. As of March 31, 2018, there were 45,723,048 shares of common stock outstanding. Unless otherwise indicated, the address for each beneficial owner is c/o Acceleron Pharma Inc., 128 Sidney Street, Cambridge, MA 02139.

Name and address of beneficial owner	Number of shares beneficially owned	Percentage of shares beneficially owned
5% or greater stockholders:		
Celgene Corporation(1)	6,157,458	13.6 %
FMR LLC and affiliates(2)	5,106,687	11.2 %
Blackrock, Inc. and subsidiaries(3)	3,512,821	7.7 %
T. Rowe Price Associates, Inc.(4)	3,184,770	7.0 %
The Vanguard Group(5)	2,438,378	5.4 %
Directors and named executive officers:		
Habib J. Dable(6)	131,800	*
Jean M.	48,750	*

George(7)		
George Golumbeski, Ph.D.	—	
Terrence C. Kearney(8)	43,415	*
Tom Maniatis, Ph.D.(9)	190,481	*
Thomas A. McCourt(10)	15,484	*
Francois Nader, M.D.(11)	49,326	*
Richard F. Pops(12)	90,000	*
Karen L. Smith, M.D., Ph.D.(13)	3,333	*
Joseph S. Zakrzewski(14)	71,500	*
Steven D. Ertel(15)	165,737	*
Ravindra Kumar, Ph.D.(16)	129,516	*
Kevin F. McLaughlin(17)	106,972	*
John D. Quisel, J.D., Ph.D.(18)	122,538	*
Matthew L. Sherman, M.D.(19)	147,094	*
All executive officers and directors as	1,379,783	3.0 %

a
group
(17
persons)(20)
* Represents beneficial ownership of less than one percent of our outstanding common stock.
(1) This information is based solely on a Schedule 13D/A filed by Celgene Corporation ("Celgene") on September 25, 2017, reporting ownership as of September 25, 2017. According to this Schedule 13D/A, these shares include 38,979 shares of common stock that can be acquired upon the exercise of warrants to purchase shares of our common stock, and Celgene exercises sole voting and sole dispositive authority over all of these shares. The address of Celgene is 86 Morris Avenue, Summit, NJ 07901.
(2) This information is based solely on a Schedule 13G/A filed jointly by FMR LLC ("FMR") and Abigail P. Johnson on February 13, 2018, reporting ownership as of December 29, 2017. According to this Schedule 13G/A, Ms. Johnson is a Director, the Chairman and the Chief Executive Officer of FMR. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners,

directly or through trusts, of Series B voting common shares of FMR, representing 49% of the voting power of FMR. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR. FMR exercises sole voting authority over 1,439,200 shares of our common stock, and FMR and Ms. Johnson each exercise sole dispositive authority over 5,106,687 shares of our common stock. The address of FMR and Ms. Johnson is 245 Summer Street, Boston, Massachusetts 02210.

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(3) This information is based solely on a Schedule 13G/A filed by Blackrock, Inc. ("Blackrock") on January 23, 2018, reporting ownership as of December 31, 2017 for Blackrock and its subsidiaries. According to this Schedule 13G/A, Blackrock exercises sole voting power over 4,639,759 shares of our common stock, and sole dispositive power over 4,732,135 shares of our common stock. The address of Blackrock is 55 East 52nd Street, New York, New York 10055.
(4) This information is based solely on a Schedule 13G/A filed by T. Rowe Price Associates, Inc. ("T. Rowe") on February 14, 2018, reporting ownership as of December 31, 2017. According to this Schedule 13G/A, T. Rowe exercises sole voting power

over 605,107 shares of our common stock and sole dispositive power over 3,184,770 shares of our common stock. The address of T. Rowe is 100 E. Pratt Street, Baltimore, Maryland 21202. (5) This information is based solely on a Schedule 13G filed by The Vanguard Group ("Vanguard") on February 8, 2018, reporting ownership as of December 31, 2017. According to this Schedule 13G, Vanguard exercises sole voting power over 64,607 shares of our common stock, shared voting power over 2,600 shares of our common stock, sole dispositive power over 2,374,871 shares of our common stock and shared dispositive power over 63,507 shares of our common stock. The address of Vanguard is 100 Vanguard Blvd.,

Malvern, Pennsylvania 19355.
(6) Consists of shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Mr. Dable.
(7) Includes 47,500 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Ms. George.
(8) Includes 42,165 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Mr. Kearney.
(9) Includes 56,250 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Dr. Maniatis.

(10) Includes 14,939 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Mr. McCourt.
(11) Includes 48,076 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Dr. Nader.
(12) Includes 60,000 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Mr. Pops.
(13) Consists of shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Dr. Smith.
(14) Includes 66,250 shares of common stock

that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Mr. Zakrzewski.
(15) Includes 113,500 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Mr. Ertel.
(16) Includes 67,441 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Dr. Kumar.
(17) Includes 94,471 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Mr. McLaughlin.
(18) Includes 100,528 shares of common stock that can be acquired upon the exercise of

options exercisable within 60 days of March 31, 2018 held by Dr. Quisel.
(19) Includes 8,500 shares of common stock beneficially owned by Dr. Sherman through an irrevocable trust of which Dr. Sherman's wife is a trustee, and 108,594 shares of common stock that can be acquired upon the exercise of options exercisable within 60 days of March 31, 2018 held by Dr. Sherman.
(20) See footnotes 6 through 19. Also includes 63,243 shares of common stock that can be acquired upon the exercise of outstanding options exercisable within 60 days of March 31, 2018.

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MANAGEMENT AND CORPORATE GOVERNANCE

BOARD COMPOSITION AND STRUCTURE

Our certificate of incorporation states that the Board of Directors shall consist of not fewer than three and not more than fifteen members, and the precise number of directors shall be fixed by a resolution of the Board of Directors. Each director holds office until his or her successor is duly elected and qualified or until his or her death, resignation or removal. Our certificate of incorporation provides that our directors may be removed only for cause by the affirmative vote of the holders of at least seventy-five percent (75%) of the voting power of the outstanding shares of capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class, at a meeting of the stockholders called for that purpose. Any vacancy in the Board of Directors, including a vacancy that results from an increase in the number of directors, may be filled by a vote of the majority of the directors then in office.

Our certificate of incorporation provides that the Board of Directors is divided into three classes of directors, with the classes as nearly equal in number as possible. Each of our directors identified below serves in the class indicated. Subject to any earlier resignation or removal in accordance with the terms of our restated certificate of incorporation and bylaws, our Class II directors who are re-elected at the 2018 annual meeting of stockholders will serve until the 2021 annual meeting of stockholders; our Class III directors will serve until the 2019 annual meeting of stockholders; and our Class I directors will serve until the 2020 annual meeting of stockholders. Any additional directorships resulting from an increase in the number of directors will be apportioned by the Board among the three classes.

The Board of Directors is currently comprised of ten members. Below is a list of the names, ages as of March 31, 2018 and classification of the individuals who currently serve as our directors.

Name	Age	Position
Jean M. George	60	Director (Class I)
George Golumbeski, Ph.D.	60	Director (Class I)
Thomas A. McCourt	60	Director (Class I)
Francois Nader, M.D.	61	Chair of the Board of Directors (Class I)
Habib J. Dable	48	Director (Class II); Chief Executive Officer and President
Terrence C. Kearney	63	Director (Class II)
Karen L. Smith, M.D., Ph.D.	50	Director (Class II)
Tom Maniatis, Ph.D.	74	Director (Class III)
Richard F. Pops	56	Director (Class III)
Joseph S. Zakrzewski	55	Director (Class III)

DIRECTOR BIOGRAPHIES

Information concerning our directors is set forth below. The biographical description of each director includes the specific experience, qualifications, attributes and skills that led to the Board of Directors' conclusion at the time of filing of this proxy statement that each person listed below should serve as a director.

CLASS II DIRECTOR NOMINEES

Habib J. Dable has served as our Chief Executive Officer and President and a member of our Board of Directors since December 2016. Mr. Dable is a seasoned pharmaceutical executive, with experience in maximizing the potential of new therapies and successfully implementing innovative U.S. and global product launches. Prior to joining us, Mr. Dable served in roles of increasing responsibility at Bayer AG beginning in 1994, most recently serving as the President of Pharmaceuticals for Bayer in the U.S. from October 2015 until December 2016. From 2013 to 2015, Mr. Dable served as the Executive Vice President and Global Head of Specialty Medicine for Bayer HealthCare Pharmaceuticals, and from 2010 to 2012, he was the Vice President of Ophthalmology & Global Launch Team Head for EYLEA. Mr. Dable earned both Bachelor’s and Master’s degrees of Business Administration from the University of New Brunswick in Canada. We believe Mr. Dable’s executive leadership experience and industry knowledge qualify him to serve as a member of our Board of Directors.

Terrence C. Kearney has served as a member of our Board of Directors since July 2014. Mr. Kearney has served as a member of the board of directors of Vertex Pharmaceuticals Incorporated since 2011 and as a member of the board of

directors of AveXis, Inc. since January, 2016. Mr. Kearney previously served as a member of the board of directors of Innoviva, Inc. (formerly Theravance, Inc.) from 2014 to 2016, and as the Chief Operating Officer of Hospira, Inc., a specialty pharmaceutical and medication delivery company, from 2006 to 2011. From 2004 to 2006, he served as Hospira's Senior Vice President,

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Finance, and Chief Financial Officer, and he served as Acting Chief Financial Officer through 2006. Mr. Kearney served as Vice President and Treasurer of Abbott Laboratories from 2001 to 2004. From 1996 to 2001, Mr. Kearney was Divisional Vice President and Controller for Abbott's International Division. He received a BS in biology from the University of Illinois and an MBA from the University of Denver. We believe that Mr. Kearney's extensive experience as a director and officer of many biotechnology companies and his financial expertise qualify him to serve as a member of our Board of Directors.

Karen L. Smith, M.D., Ph.D. has served on our Board of Directors since November 2017. Dr. Smith has served as the Global Head of Research & Development and Chief Medical Officer of Jazz Pharmaceuticals plc since April 2015, and will depart Jazz Pharmaceuticals plc effective as of May 31, 2018. Dr. Smith has served as a member of the board of directors of Sucampo Pharmaceuticals, Inc. since July 2017, and previously served as a member of the board of directors of Forward Pharma A/S from May 2016 to May 2017. From January 2011 to March 2015, she was Senior Vice President, Global Medical Affairs and Global Therapeutic Area Head (Dermatology) for Allergan, Inc. From October 2007 to December 2010, Dr. Smith served initially as Vice President, External Medical Relations and then Vice President, Global Development at AstraZeneca LP. From 2002 to 2007, Dr. Smith held a variety of management and medical roles with Bristol-Myers Squibb Company in Australia, Canada, and the United States, most recently as the Head of U.S. Clinical Operations. In 2001, Dr. Smith was the Chief Executive Officer of Boron Molecular, a specialist fine chemicals manufacturing company. She also currently serves on the Women's Advisory Board for Ironman Corporation. Dr. Smith received a B.A.Sc. and a B.Sc. from the Curtin University of Technology, an M.D. from the University of Warwick, a Ph.D. in oncology molecular genetics from the University of Western Australia, an M.B.A. from the University of New England (Australia) and an L.L.M. in medical law from the University of Salford.

CURRENT DIRECTORS NOT STANDING FOR ELECTION AT THE ANNUAL MEETING

Jean M. George has served as a member of our Board of Directors since 2005. Since 2002, Ms. George has been a Managing Director at Advanced Technology Ventures (ATV), and, concurrently since April 2013, Ms. George has been a Managing Director at Lightstone Ventures. She joined ATV in 2002 and serves as the firm's East Coast lead partner for healthcare investments. Prior to joining ATV, Ms. George was a director at BancBoston Ventures, where she led the health care team's investment activity in NuGenesis Technologies Corp., Ironwood Pharmaceuticals, Inc., Syntonix Pharmaceuticals, Inc. and Neurometrix, Inc. Before BancBoston Ventures, she worked at Genzyme Corporation from 1988 to 1998, where she held a variety of operational roles in marketing, product development, and business development, including Vice President of Global Sales and Marketing. She also worked as a Vice President and Founder of Genzyme's Tissue Repair Division. She is currently a director of public companies Catabasis Pharmaceuticals, Inc. and Calithera Biosciences, Inc., as well as several private companies, including Hydra Biosciences, Inc., Thrasos Therapeutics, Inc., Disarm Therapeutics, and Gemini Therapeutics, and a board observer on Tizona Therapeutics. Ms. George was previously a director of Zeltiq Aesthetics, Inc., Hypnion, Inc., Critical Therapeutics, Inc., Portola Pharmaceuticals, Inc. Five Prime Therapeutics and Proteolix, Inc. She was named a member of the Scientific Advisory Board for the Massachusetts Life Sciences Center. Ms. George received a B.S. in biology from the University of Maine and an M.B.A. from Simmons College Graduate School of Management. We believe that Ms. George's executive experience in the life sciences and therapeutic device industries qualifies her to serve as a member of our Board of Directors.

George Golumbeski, Ph.D. has served as a member of our Board of Directors since 2011. Dr. Golumbeski, who joined Celgene in early 2009, is Executive Vice President of Business Development, and he is responsible for the full array of business development activities, including identification and evaluation of opportunities, structuring and negotiating transactions, in-licensing, M&A, out-licensing, and alliance management. At Celgene, these activities are focused primarily within the therapeutic areas of oncology and inflammation. Dr. Golumbeski will retire from Celgene on April 16, 2018. Since 2014, Dr. Golumbeski has served on the board of directors of one other public company, Enanta Pharmaceuticals, Inc., and has served as a trustee of the Keck Graduate Institute since 2013. Dr. Golumbeski has also served as a member of the board of directors of the National Audubon Society since 2015. From 2008 to 2009, Dr. Golumbeski served as the CEO of Nabriva Therapeutics AG. Prior to Nabriva, Dr. Golumbeski served as Vice President of Business Development, Licensing and Strategy for Novartis-Oncology. During his tenure at Novartis, Dr. Golumbeski's group closed a significant number of collaboration agreements which bolstered the

development pipeline. Earlier in his career, Dr. Golumbeski held senior positions at Elan Pharmaceuticals and at Schwarz Pharma, where he led the effort to in-license rotigotine and lacosamide (now both approved agents). Dr. Golumbeski received a B.A. in biology from the University of Virginia and a Ph.D. in genetics from the University of Wisconsin-Madison. We believe that Dr. Golumbeski's experience as an officer of other pharmaceutical companies, as well as Dr. Golumbeski's extensive experience in research and development and corporate leadership positions, qualify him to serve as a member of our Board of Directors.

Tom Maniatis, Ph.D. co-founded Acceleron in 2003 and has served as a member of our Board of Directors since our inception. Dr. Maniatis is currently a member of our Scientific Advisory Board and served as the Chair of our Scientific Advisory Board from 2003 to 2016. He is currently a Professor and Chair of the Department of Biochemistry & Molecular

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Biophysics at the Columbia University College of Physicians and Surgeons. Dr. Maniatis also currently serves on the board of a private company, Kallyope, Inc. Prior to 2010 he was a professor of Molecular and Cellular Biology at Harvard University. Prior to that Dr. Maniatis was a co-founder of Genetics Institute (1980) and ProScript Inc., and in both companies he chaired the scientific advisory board and served on the board of directors. Dr. Maniatis is a member of the U.S. National Academy of Sciences, the U.S. National Academy of Medicine, and has received numerous awards for his research contributions, including the Eli Lilly Research Award in Microbiology and Immunology, the Richard Lounsbery Award for Biology and Medicine from the U.S. and French National Academies of Science, and the 2012 Lasker-Koshland Special Achievement Award in Medical Science. Dr. Maniatis received a BA in biology, an MS in chemistry from the University of Colorado at Boulder, and a Ph.D. in molecular biology from Vanderbilt University. We believe Dr. Maniatis' extensive experience and knowledge of biopharmaceuticals and the biopharmaceutical industry qualify him to serve as a member of our Board of Directors.

Thomas A. McCourt has served as a member of our Board of Directors since July 2016. Mr. McCourt has served as the senior vice president of marketing and sales and chief commercial officer of Ironwood Pharmaceuticals, Inc. since joining Ironwood in 2009. Prior to joining Ironwood, Mr. McCourt led the U.S. brand team for denosumab at Amgen Inc. from April 2008 to August 2009. Prior to that, Mr. McCourt was with Novartis AG from 2001 to 2008, where he directed the launch and growth of Zelnorm for the treatment of patients with IBS-C and CIC and held a number of senior commercial roles, including vice president of strategic marketing and operations. Mr. McCourt was also part of the founding team at Astra Merck Inc., leading the development of the medical affairs and science liaison group and then serving as brand manager for Prilosec™ and NEXIUM®. Mr. McCourt has a degree in pharmacy from the University of Wisconsin. We believe that Mr. McCourt’s commercial leadership experience and industry experience working for many well established companies qualify him to serve as a member of our Board of Directors.

Francois Nader, M.D. has served as a member of our Board of Directors since December 2014, and has served as the Chair of our Board of Directors since March 2015. Since February 2015, Dr. Nader has served as founder and managing director of Jesra Advisors, LLC, a consulting services company. He served as the President and Chief Executive Officer of NPS Pharmaceuticals, Inc., or NPS, from 2008 through February 2015 when NPS was acquired by Shire plc. Dr. Nader joined NPS in 2006 and served as Executive Vice President and Chief Operating Officer until 2008. Since November 2017, he has served as a director of Alexion Pharmaceuticals, Inc., and is currently a member of their audit and finance, and science and innovation committees. Dr. Nader has also served as a director of Clementia Pharmaceuticals, Inc. since March 2014 and is the chair of the nominating and corporate governance committee, and was a co-founder and has served as a director of ArRETT Neuroscience since June 2016. Dr .Nader previously served as a director of Advanced Accelerator Applications SA from 2016 to 2018, Baxalta, Inc. from 2015 to 2016, Trevena, Inc. from 2014 to 2015 and Noven Pharmaceuticals in 2009. Before joining NPS, Dr. Nader was a venture partner at Care Capital, LLC, where he served as Chief Medical Officer of its Clinical Development Capital unit from 2005 to 2006. From 2000 to 2004, he served as Senior Vice President, Integrated Healthcare Markets and Senior Vice President, North America Medical and Regulatory Affairs with Aventis Pharmaceuticals. He also held similar positions at Hoechst Marion Roussel and served as Head of Global Commercial Operations at the Pasteur Vaccines division of Rhone-Poulenc. Dr. Nader is a past Chair of the Board of BioNJ, a trade association representing the biotechnology industry in New Jersey, and a Board member of the New Jersey Chamber of Commerce. Dr. Nader received a French State Doctorate in Medicine from St. Joseph University (Lebanon) and a Physician Executive M.B.A. from the University of Tennessee. We believe Dr. Nader's extensive experience in the life sciences industry and his background in research and development qualify him to serve as a member of our Board of Directors.

Richard F. Pops has served as a member of our Board of Directors since 2004. Since 2011, Mr. Pops has served as Chief Executive Officer and Chairman of the board of Alkermes plc, the parent company of Alkermes. From 2009 to 2011, Mr. Pops served as Chief Executive Officer and Chairman of the Board of Alkermes, from 2007 to 2009 he served as the Chairman of the board of Alkermes, and from 1991 through 2007 he served as the Chief Executive Officer of Alkermes. Mr. Pops also serves on the board of directors of two other public companies, Neurocrine Biosciences, Inc. and Epizyme Inc., on the board of directors for the Biotechnology Industry Organization (BIO) and Pharmaceutical Researcher and Manufacturers of America (PhRMA), and the National Health Council. He has previously served on the board of directors of Sirtris Pharmaceuticals from 2004 to 2008, and CombinatoRx, Inc. from

2001 to 2009. Mr. Pops also served on the board of directors of Reliant Pharmaceuticals, a privately held pharmaceutical company purchased by GlaxoSmithKline in 2007, and on the advisory board of Polaris Venture Partners. He was a member of the Harvard Medical School Board of Fellows from 2002 through June 2012. Mr. Pops received a BA in economics from Stanford University. We believe that Mr. Pops' leadership experience and industry knowledge qualify him to serve as a member of our Board of Directors.

Joseph S. Zakrzewski has served as a member of our Board of Directors since 2011. Mr. Zakrzewski has also served as a member of the board of directors of Amarin Corporation since 2010, Onxeo S.A. since 2015 (Chairman) and Sangamo Therapeutics, Inc. since June 2017. From 2008 through 2017, Mr. Zakrzewski served as a member of the board of directors of Insulet Corporation. From 2010 through 2013, Mr. Zakrzewski served as Chairman and Chief Executive Officer of Amarin. From 2007 to 2010, Mr. Zakrzewski served as President and Chief Executive Officer of Xcellerex. From 2005 to 2007,

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Mr. Zakrzewski served as the Chief Operating Officer of Reliant Pharmaceuticals. From 1988 to 2004, Mr. Zakrzewski served in a variety of positions at Eli Lilly and Company including as Vice President, Corporate Business Development from 2003 through 2004. In addition, Mr. Zakrzewski served as a Venture Partner with OrbiMed in 2010 and 2011. He also currently serves and has previously served on the board of directors of a number of privately held companies. Mr. Zakrzewski received a BS in Chemical Engineering and an MS in Biochemical Engineering from Drexel University as well as an MBA in Finance from Indiana University. We believe that Mr. Zakrzewski's substantial experience as an executive officer of other pharmaceutical companies, as well as Mr. Zakrzewski's service on boards of directors of other pharmaceutical companies qualify him to serve as a member of our Board of Directors.

Director Independence

Under NASDAQ Rule 5605, a majority of a listed company's board of directors must be comprised of independent directors. In addition, NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit committee, compensation committee and nominating and corporate governance committee be independent and, in the case of the audit committee and compensation committee, satisfy additional independence criteria set forth in Rule 10A-3 and 10C-1, respectively, under the Securities Exchange Act of 1934, or the Exchange Act.

Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, the Board of Directors has determined that each of Ms. George, Messrs. Kearney, McCourt, Pops and Zakrzewski, and Drs. Golumbeski, Maniatis, Nader, and Smith, representing nine of our ten directors, is "independent" as that term is defined under NASDAQ Rule 5605(a)(2). The Board of Directors also determined that each of the current members of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee satisfies the independence standards for such committee established by Rule 10A-3 and 10C-1 under the Exchange Act, the SEC rules and the NASDAQ rules, as applicable. In making such determination, the Board of Directors considered the relationships that each such non-employee director has with our Company and all other facts and circumstances deemed relevant in determining their independence.

As part of such determination, the Board of Directors reviewed the facts and circumstances relevant to Dr. Maniatis's independence given his status as one of our co-founders. The Board of Directors considered that Dr. Maniatis has never served as one of Acceleron's executives or other employees and he has not managed any operational activities at Acceleron. The Board of Directors further considered that Acceleron was founded nearly fifteen years ago and Dr. Maniatis was employed full time at Harvard University at such time. Based on these factors, the Board of Directors determined that Dr. Maniatis satisfies the independence standards established by the SEC and NASDAQ rules, as applicable.

Board Meetings and Attendance

The Board of Directors held five meetings during the year ended December 31, 2017. Each of the directors attended at least seventy-five percent (75%) of the meetings of the Board of Directors and the committees of the Board of Directors on which he or she served during the year ended December 31, 2017 (in each case, which were held during the period for which he or she was a director and/or a member of the applicable committee and excluding any meetings in which a director was an interested party), except for Dr. Golumbeski, Mr. Pops and our former director Terrance McGuire. Mr. McGuire resigned from our Board of Directors effective as of November 15, 2017.

The non-employee directors met in executive session during each of the regularly scheduled Board of Directors meetings during the year ended December 31, 2017.

The Board of Directors has adopted a policy requiring that members of the Board of Directors make every effort to attend our annual stockholder meetings. Nine of our then ten directors attended our 2017 Annual Meeting of Stockholders.

Board of Directors Leadership Structure

Our current Board leadership structure separates the positions of Chief Executive Officer and Chair of the Board of Directors, although we do not have a corporate policy requiring that structure. The Board believes that this separation is appropriate for the organization at this time because it allows for a division of responsibilities and a sharing of ideas between individuals having different perspectives. Our Chief Executive Officer, who is also a member of our Board of

Directors, is primarily responsible for our operations and strategic direction, while our Board Chair, who is an independent member of the Board, is primarily focused on matters pertaining to corporate governance, including management oversight, and strategic guidance. While the Board believes that this is the most appropriate structure at this time, the Nominating and Corporate Governance Committee evaluates the Board leadership structure from time to time, and may recommend alterations of this structure in the future.

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The Board of Directors' Role in Risk Oversight

The Board of Directors plays an important role in risk oversight at Acceleron through direct decision-making authority with respect to significant matters, as well as through the oversight of management by the Board of Directors and its committees. In particular, the Board of Directors administers its risk oversight function through (1) the review and discussion of regular periodic reports by the Board of Directors and its committees on topics relating to the risks that Acceleron faces, (2) the required approval by the Board of Directors (or a committee of the Board of Directors) of significant transactions and other decisions, (3) the direct oversight of specific areas of Acceleron's business by the Audit, Compensation and Nominating and Corporate Governance Committees, and (4) regular periodic reports from the auditors and other outside consultants regarding various areas of potential risk, including, among others, those relating to our internal control over financial reporting. The Board of Directors also relies on management to bring significant matters impacting Acceleron to the attention of the Board of Directors.

Pursuant to the Audit Committee's charter, the Audit Committee is responsible for reviewing and discussing with management and Acceleron's independent registered public accounting firm, Acceleron's system of internal controls, its critical accounting practices, and policies relating to risk assessment and management. As part of this process, the Audit Committee discusses Acceleron's major financial risk exposures and steps that management has taken to monitor and control such exposure. In addition, the Audit Committee has established procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and the confidential, anonymous submissions by employees of concerns regarding accounting, internal accounting controls, auditing and compliance matters.

Because of the role of the Board of Directors and the Audit Committee in risk oversight, the Board of Directors believes that any leadership structure that it adopts must allow it to effectively oversee the management of the risks relating to Acceleron's operations. The Board of Directors acknowledges that there are different leadership structures that could allow it to effectively oversee the management of the risks relating to the Company's operations and believes its current leadership structure enables it to effectively provide oversight with respect to such risks.

BOARD COMMITTEES

The Board of Directors has a standing Audit, Compensation and Nominating and Corporate Governance Committee, each of which is comprised solely of independent directors, and is described more fully below. Each committee operates pursuant to a written charter and each reviews and assesses the adequacy of its charter periodically and submits its charter to the Board for approval. The charters for each committee are all available on our website (www.acceleronpharma.com) under the "Investors/Media—Corporate Governance" section.

The following table describes which directors currently serve on each of the Board of Directors' committees.

Name	Nominating and Corporate Governance Committee	Compensation Committee	Audit Committee
Habib J. Dable(1)			
Jean M. George	X (2)		X
George Golumbeski, Ph.D.			
Terrence C. Kearney(1)		X (2)	X
Tom Maniatis, Ph.D.	X		
Thomas A. McCourt		X	X
Francois Nader, M.D.	X		
Richard F. Pops	X		
Karen L. Smith, M.D., Ph.D.		X	
Joseph S. Zakrzewski		X	X (2)

(1) Nominated for re-election at the 2018 annual meeting of stockholders. See Proposal 1.

(2) Chair of the committee.

Audit Committee

Our Audit Committee is composed of Jean M. George, Terrence C. Kearney, Thomas A. McCourt and Joseph S. Zakrzewski, with Mr. Zakrzewski serving as Chair of the committee. The Board of Directors has determined that each member of the Audit Committee meets the independence requirements of Rule 10A-3 under the Exchange Act and the applicable listing

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standards of NASDAQ. The Board of Directors has determined that Messrs. Kearney and Zakrzewski are "audit committee financial experts" within the meaning of the Securities and Exchange Commission, or SEC, regulations and applicable listing standards of NASDAQ. The Audit Committee's responsibilities include:

- appointing, approving the compensation of, and assessing the qualifications, performance and independence of our independent registered public accounting firm;
- pre-approving audit and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the audit plan with the independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting- and compliance-related complaints and concerns;
- reviewing complaints received through our disclosure program regarding matters that fall within the purview of the Audit Committee;
- recommending, based upon the Audit Committee's review and discussions with management and the independent registered public accounting firm, whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- reviewing and overseeing our compliance program and compliance activities;
- preparing the audit committee report required by the rules of the SEC to be included in our annual proxy statement;
- reviewing and overseeing our Code of Business Conduct and Ethics;
- viewing all related party transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing and discussing with management and our independent registered public accounting firm our earnings releases and scripts.

During the year ended December 31, 2017, the Audit Committee met eight times. The report of the Audit Committee is included in this proxy statement under "Audit Committee Report."

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee is composed of Jean M. George, Tom Maniatis, Ph.D., Francois Nader, M.D., and Richard F. Pops, with Ms. George serving as Chair of the committee. The Board of Directors has determined that each member of the Nominating and Corporate Governance Committee is "independent" as defined under the applicable listing standards of NASDAQ. The Nominating and Corporate Governance Committee's responsibilities include:

- developing and recommending to the Board of Directors criteria for Board and committee membership;
- establishing procedures for identifying and evaluating Board of Director candidates, including nominees recommended by stockholders;
- identifying individuals qualified to become members of the Board of Directors;
- recommending to the Board of Directors the persons to be nominated for election as directors and to each of the Board's committees;
- developing and recommending to the Board of Directors a set of corporate governance principles;
- articulating to each director what is expected, including reference to the corporate governance principles and directors' duties and responsibilities;
- reviewing and recommending to the Board of Directors practices and policies with respect to directors;
- reviewing and recommending to the Board of Directors the functions, duties and compositions of the committees of the Board of Directors;
- reviewing and assessing the adequacy of the committee charter and submitting any changes to the Board of Directors for approval;

- considering and reporting to the Board of Directors any questions of possible conflicts of interest of Board of Directors members;
- providing for new director orientation and continuing education for existing directors on a periodic basis;
- performing an evaluation of the performance of the committee; and
- overseeing the evaluation of the Board of Directors and management.

During the year ended December 31, 2017, the Nominating and Corporate Governance Committee met two times.

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Compensation Committee

Our Compensation Committee is composed of Terrence C. Kearney, Thomas A. McCourt, Karen L. Smith, M.D., Ph.D. and Joseph S. Zakrzewski, with Mr. Kearney serving as Chair of the committee. The Board of Directors has determined that each member of the Compensation Committee is "independent" as defined under the applicable listing standards of NASDAQ and meets the independence criteria set forth in Rule 10C-1. The Compensation Committee's responsibilities include:

- annually reviewing and recommending to the Board of Directors corporate goals and objectives relevant to the compensation of our chief executive officer and our other executive officers;
- evaluating the performance of our chief executive officer in light of such corporate goals and objectives and reviewing and recommending the compensation of our chief executive officer to the Board of Directors for approval;
- reviewing and approving the compensation of our other executive officers;
- appointing, compensating and overseeing the work of any compensation consultant, legal counsel or other advisor retained by the Compensation Committee;
- conducting the independence assessment outlined in NASDAQ rules with respect to any compensation consultant, legal counsel or other advisor retained by the Compensation Committee;
- annually reviewing and reassessing the adequacy of its committee charter in compliance with the listing requirements of NASDAQ;
- establishing and reviewing our overall management compensation philosophy and policy;
- overseeing and administering our equity compensation and other incentive compensation plans;
- reviewing and approving our equity and incentive compensation policies and procedures for the grant of equity-based awards and approving the grant of such equity-based and other incentive awards;
- reviewing and making recommendations to the Board of Directors with respect to director compensation; and
- reviewing and discussing with management the compensation discussion and analysis to be included in our annual proxy statement.

During the year ended December 31, 2017, the Compensation Committee met seven times. The report of the Compensation Committee is included in this proxy statement under "Compensation Committee Report."

Compensation Consultant

The Compensation Committee has engaged Radford, Aon Hewitt, a business unit of Aon plc, as its independent compensation consultant. Radford provides analysis and recommendations to the Compensation Committee regarding:

- trends and emerging topics with respect to executive compensation;
- peer group selection for executive compensation benchmarking;
- compensation practices of our peer group;
- compensation programs for our executives, directors and our employees; and
- stock utilization and related metrics.

When requested, Radford consultants attend meetings of the Compensation Committee, including executive sessions in which executive compensation related matters are discussed. Radford reports to the Compensation Committee and not to management, although Radford meets with management for purposes of gathering information for its analyses and recommendations.

In determining to engage Radford, the Compensation Committee considered the independence of Radford, taking into consideration relevant factors, including the absence of other services provided to the Company by Radford, the amount of fees the Company paid to Radford as a percentage of Radford's total revenue, the policies and procedures of Radford that are designed to prevent conflicts of interest, any business or personal relationship of the individual compensation advisors employed by Radford with an executive officer of the Company, any business or personal relationship the individual compensation advisors employed by Radford have with any member of the Compensation Committee, and any stock of the Company owned by Radford or the individual compensation advisors employed by Radford. The Compensation Committee has determined, based on its analysis in light of all relevant factors, including the factors listed above, that the work of Radford and the individual compensation advisors employed by Radford as compensation consultants to the Compensation Committee has not created any conflicts of interest, and that Radford is independent pursuant to the independence standards set forth in the NASDAQ listing standards promulgated

pursuant to Section 10C of the Exchange Act.

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Compensation Committee Interlocks and Insider Participation

None of the members of our Compensation Committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our Board of Directors or Compensation Committee.

Risks Related to Compensation Practices and Policies

The Compensation Committee maintains a pay-for-performance compensation philosophy, but also recognizes that providing certain types of compensation incentives may inadvertently motivate individuals to act in ways that could be detrimental to our company as a whole in order to maximize personal compensation. To minimize such risk, the Compensation Committee reviews at least annually the overall structure and components of our compensation program. The Compensation Committee also performs an annual evaluation intended to ensure that salary levels, equity awards and other elements of compensation are benchmarked against appropriate standards and that incentives provided for achievement of target goals are balanced between short-term rewards and longer-term enhancement of stockholder value. The Compensation Committee has reviewed and evaluated the philosophy and standards on which our compensation plans have been developed and implemented across Acceleron. It is our belief that our compensation program does 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 business. 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 behaviors and controls that would mitigate the potential for adverse risk caused by the action of our executives, including the following:

- the establishment of base salaries consistent with our executive officers' responsibilities and market data, intended to ensure that our executive officers would not be motivated to take excessive risks to achieve a reasonable level of financial security;
- the annual establishment of corporate objectives for our performance-based short-term incentive compensation program for our executive officers 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, annual and long-term and cash and equity compensation is designed to encourage strategies and actions that balance our short-term and long-term best interests;
- stock option awards and restricted stock unit awards vest over time, which we believe encourages executives to take a long-term view of our business; and
- the discretion available to our Compensation Committee not to apply fixed formulae in assessing our company performance for purposes of annual performance-based short-term incentives, which allows the Compensation Committee to, among other things, (a) eliminate the potential incentive for management to conduct activities that form part of our annual company performance goals, but which may not, due to new data or other developments, ultimately prove to be in the best interest of our stockholders, and (b) reward management for making decisions that are in the long-term best interest of our therapeutic candidate development programs, even when those decisions result in the failure to meet short-term company performance goals.

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Our code of business conduct and ethics is available on our website. We intend to disclose any amendments to the code, or any waivers of its requirements, on our website.

EXECUTIVE OFFICERS

Below is a list of the names, ages as of March 31, 2018 and positions, and a brief account of the business experience of the individuals who serve as our executive officers.

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Name	Age	Position
Habib J. Dable	48	Chief Executive Officer and President; Director (Class II)
Kevin F. McLaughlin	61	Senior Vice President, Chief Financial Officer and Treasurer
Matthew L. Sherman, M.D.	62	Executive Vice President and Chief Medical Officer
John D. Quisel, J.D., Ph.D.	46	Senior Vice President, Corporate Development, General Counsel and Secretary
Ravindra Kumar, Ph.D.	58	Senior Vice President and Chief Scientific Officer
Sujay R. Kango	54	Senior Vice President and Chief Commercial Officer
Christopher R. Rovaldi	44	Senior Vice President, Program Management and Operations

EXECUTIVE OFFICER BIOGRAPHIES

Habib J. Dable's biography is included under "Director Biographies" above.

Kevin F. McLaughlin joined Acceleron in November 2010 and is our Senior Vice President, Chief Financial Officer and Treasurer. Since January 2015, Mr. McLaughlin has served on the board of directors of Vericel Corporation, and since August 2017 has served on the board of directors of Stealth Biotherapeutics Inc. He also recently served, from 2009 through 2010, as Senior Vice President and Chief Financial Officer of Qteros, Inc. He was a co-founder of Aptius Education, Inc. and from 2007 through 2009 he worked as the Chief Operating Officer and a director. From 1996 through 2007, Mr. McLaughlin held several executive positions with PRAECIS Pharmaceuticals, Inc. He joined PRAECIS as their first Chief Financial Officer where he had responsibility for private financings, partnership financings, the company's initial public offering and subsequent stock offering. Later, Mr. McLaughlin became COO, and then President and CEO, and he served as a member of the board of directors. In this capacity he was responsible for negotiating the sale of the company to GlaxoSmithKline. He began his career in senior financial roles at Prime Computer and Computervision Corporation. Mr. McLaughlin received a B.S. in business from Northeastern University and an MBA from Babson College.

Matthew L. Sherman, M.D. joined Acceleron in May 2006 and is our Executive Vice President and Chief Medical Officer. Since October 2016, Dr. Sherman has served on the board of directors of Pulmatrix, Inc. Previously, he served as Senior Vice President and Chief Medical Officer at Synta Pharmaceuticals Corp. where he was responsible for clinical research, clinical operations, biostatistics, data management, regulatory affairs, quality assurance and program management. Prior to that, Dr. Sherman worked at Genetics Institute and Wyeth Pharmaceuticals in various capacities including Therapeutic Area Director for Oncology. While at Wyeth, Dr. Sherman provided senior oncology and hematology leadership for worldwide clinical development for both small molecule and biologic therapeutics, including the submission and approval of Mylotarg® by the FDA. He has published numerous papers and book chapters in the field of oncology and clinical development and is named as an inventor of several patents. Dr. Sherman is board certified in Medical Oncology and Internal Medicine and held various clinical positions at Harvard Medical School with corresponding hospital appointments at the Dana-Farber Cancer Institute and Brigham and Women's Hospital. Dr. Sherman received an S.B. in chemistry from the Massachusetts Institute of Technology and an M.D. from Dartmouth Medical School.

John D. Quisel, J.D., Ph.D. joined Acceleron in October 2006 and is currently our Senior Vice President, Corporate Development, General Counsel and Secretary. Prior to joining us, Dr. Quisel worked at the Boston office of Ropes & Gray LLP and, prior to that, the Boston office of Foley Hoag LLP. In his work at law firms, Dr. Quisel has, through strategic in-licensing and protection of internal research programs, assembled and licensed product and platform focused intellectual property portfolios for numerous biotechnology ventures. Over his entire career, Dr. Quisel's experience spans many aspects of biotechnology law, including the negotiation of intellectual property licenses and product development collaborations, patent prosecution and litigation. Dr. Quisel received an AB in biology from Harvard University, an MS in biology from Stanford University, a Ph.D. in biology from the Massachusetts Institute of Technology and a J.D. from Harvard Law School.

Ravindra Kumar, Ph.D. joined Acceleron in March 2004 and is currently our Senior Vice President and Chief Scientific Officer. Dr. Kumar established and currently leads our discovery research. Previously, Dr. Kumar worked for 12 years at Genetics Institute and Wyeth Pharmaceuticals. At Genetics Institute, Dr. Kumar was a key member of the Small Molecule Drug Discovery group and was responsible for cell biology. Following the integration of discovery functions from Genetics Institute and Wyeth Pharmaceuticals, Dr. Kumar served as Senior Scientist in the

Biological Chemistry group. Dr. Kumar is the author of several key scientific manuscripts in the area of protein glycosylation and is named as an inventor of several patents. Dr. Kumar received his BS in chemistry from Rohilkhand University, his MS in chemistry from Meerut University, his Ph.D. from University of New Brunswick and he completed his post-doctoral fellowship at Albert Einstein College of Medicine, in Bronx, NY.

Sujay R. Kango joined Acceleron in February 2018 and is currently our Senior Vice President and Chief Commercial Officer. Mr. Kango previously served as Vice President, Oncology Global Commercial at AbbVie Inc. from January 2017

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through February 2018, and as Executive Vice President and Chief Commercial Officer at Infinity Pharmaceuticals, Inc. from April 2015 through January 2017. Prior to that, Mr. Kango served from April 2011 to March 2015 as Vice President, Global Marketing, Sales Operations, and Business Analytics at Onyx Pharmaceuticals, an Amgen subsidiary and a pharmaceutical company, where he led the global Onyx proteasome inhibitor franchise, including Kyprolis® and oprozomib and co-chaired the Onyx-Bayer executive committee responsible for oversight of the companies' global kinase inhibitor franchise. Prior to Onyx, from January 2006 to March 2011, he held several leadership positions at Merck & Co., a pharmaceutical company, including vice president, hepatitis franchise and vice president, oncology integrated business unit. Prior to Merck, from November 1990 to May 2005, Mr. Kango held various commercial and marketing roles of increasing responsibility at Johnson & Johnson and Schering-Plough, each of which is a pharmaceutical company. Mr. Kango serves as a director of Cancer Care of New Jersey. Mr. Kango earned a B.S. in Microbiology and an M.B.A. from McNeese State University.

Christopher R. Rovaldi joined Acceleron in 2007 and is currently our Senior Vice President, Program Management and Operations. Mr. Rovaldi has over 10 years of Program Management experience leading antiviral, antibacterial and biologic programs spanning the development cycle from pre-IND to marketing authorization. He has worked at several biotechnology companies including Cubist Pharmaceuticals and Idenix Pharmaceuticals where he was also involved in managing various aspects of the commercial infrastructure to support each company's first product launch. Mr. Rovaldi received his B.S. and M.S. degrees in Microbiology from the University of New Hampshire.

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COMPENSATION DISCUSSION AND ANALYSIS

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COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis, or CD&A, describes the actions taken by the Compensation Committee with respect to compensation awarded or paid to our named executive officers for fiscal year 2017 and the policies and principles underlying those decisions. Our named executive officers, or NEOs, for fiscal year 2017 were:

Name	Position
Habib J. Dable	Chief Executive Officer and President
Kevin F. McLaughlin	Senior Vice President, Chief Financial Officer and Treasurer
Matthew L. Sherman, M.D.	Executive Vice President and Chief Medical Officer
John D. Quisel, J.D., Ph.D.	Senior Vice President, Corporate Development, General Counsel and Secretary
Ravindra Kumar, Ph.D.	Senior Vice President and Chief Scientific Officer
Steven D. Ertel(1)	Former Executive Vice President and Chief Operating Officer

(1) Mr. Ertel transitioned from Executive Vice President and Chief Operating Officer to the role of Special Advisor to the Chief Executive Officer effective as of April 28, 2017 due his diagnosis of amyotrophic lateral sclerosis (ALS). In connection with this transition, Mr. Ertel's employment agreement with the Company was amended as described below. Mr. Ertel’s employment with the Company terminated on September 21, 2017 due to his disability.

I. Executive Summary

We made tremendous progress in 2017 across our clinical portfolio and focused our corporate strategy on three key therapeutic areas: hematologic, neuromuscular and pulmonary. We have designed our executive compensation program to motivate, attract and retain a highly skilled team of key executives and to appropriately reward them for their contributions to our business, while also aligning their interests with those of our stockholders.

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Key Takeaways

Highlighted below are several items that provide important context regarding the Company's executive compensation program:

Pay for Performance

A basic principal of our compensation philosophy is to align pay and performance.

Realizable Pay of NEOs: Because a significant portion of our NEOs' pay is equity-based, the amount of compensation they will actually realize is based on our stock price performance. Measuring realizable pay as of a particular date helps to demonstrate the effectiveness of our pay program in achieving our objective of aligning pay with performance. The grant date fair value amounts reported in the Summary Compensation Table are not reflective of the actual realizable value of our NEO pay packages. As our Realizable Pay chart below demonstrates, actual realizable pay levels increased or decreased in 2017 depending on stock price returns, which directly aligns NEO pay with performance.

Executive Interests Aligned with Stockholder Interests

Short-term incentives are focused on the achievement of major milestone goals for our clinical trials, business development, research and finance.

Long-term incentives are based on stock price performance and the achievement of objective corporate goals over the long-term, generally with three- to four-year vesting schedules.

Additionally, NEOs are required to hold meaningful amounts of Acceleron stock pursuant to our Executive Stock Ownership Guidelines.

No Chief Executive Officer Equity Awards in 2017

In December 2016, we successfully completed a CEO transition, and as part of the transition our new CEO received an on-hire compensation package. The on-hire equity component of the compensation package was designed to compensate our new CEO in 2016 and 2017. Accordingly, the Compensation Committee did not award our CEO any additional equity in 2017.

More details on our CEO's and other NEOs' compensation are below in "Elements of Executive Compensation."

How Our Compensation Program Works

Our executive compensation philosophy is focused on aligning pay and performance. The framework we employ for measuring and rewarding performance consists of a combination of strategic, operational and financial performance goals, taking into consideration each individual executive's contributions to the achievement of those goals. As a result, a significant portion of each executive's compensation is variable and tied to the achievement of annual and longer-term corporate performance goals. In combination, these annual and longer-term goals provide a balanced view of performance and are the basis for the Compensation Committee's executive compensation decisions.

Elements of Compensation

Our executive compensation program is designed to reward executives for achievement of our short- and long-term strategic, operational and financial goals. In doing so, we have also constructed our executive compensation program to attract and retain world class talent and to align our executives' compensation opportunities with the interests of our stockholders. The Compensation Committee has selected the following primary compensation elements to achieve these objectives:

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In addition to these pay elements, our named executive officers are eligible to receive broad-based benefits that are available to our employees generally and to receive severance benefits on certain terminations of employment.

Realizable Pay

Paying for performance continues to be the core of our compensation program. A good way to demonstrate how we have utilized the aforementioned pay elements to align pay and performance is through the following chart, which shows the difference between the aggregate reported pay of our NEOs (including our former CEO who served as CEO during 2015-2016), as disclosed in our Summary Compensation Table for the 2015, 2016, and 2017 fiscal years, and the realizable pay (as defined below) for these three years as of the end of the 2017 fiscal year. Over the three-year period ended December 29, 2017, our share price declined by approximately 13%; as a result, aggregate NEO realizable pay is nearly 14% less than is reported in our Summary Compensation Table for that same period. We believe this graphic clearly illustrates that pay and performance are aligned.

“SCT” pay is the aggregate pay levels as disclosed annually in our Summary Compensation Table over the past three years. This includes actual base salary, actual annual bonuses received, and long-term incentive components (restricted stock units, performance stock units and annual stock option grants) based on the grant date fair value.

“Realizable” pay is defined as the compensation earned or deliverable during the 2015, 2016 and 2017 fiscal years, calculated as of December 29, 2017 (the last trading day of the 2017 fiscal year) using the year-end share price of $42.44 per share, and includes: actual salary received, actual annual bonuses received, and the intrinsic value of long-term incentive plan awards (whether vested or unvested).

Governance of Our Compensation Program

We have several governance practices that we believe reinforce the soundness of our executive compensation program.

Best Practices We Employ

Long-Term Focus. A majority of NEO compensation is tied to long term performance.

No Excessive Perquisites. Other than participation in benefit plans offered to all of our employees, we generally do not provide other benefits or perquisites to our executive officers.

No Hedging or Pledging. We do not allow any of our executive officers or our directors to enter into any hedging-type transactions with respect to our stock or to pledge our stock.

Equity Ownership Guidelines. We have equity ownership guidelines that apply to (i) our executive officers, requiring them to hold equity interests with a value that equals or exceeds a pre-determined multiple of their annual base salary, and (ii) our non-employee directors, requiring them to hold equity interests with a value that equals or exceeds a pre-determined multiple of their annual base retainer.

No Section 280G Gross-Ups. None of our executive officers are entitled to a Section 280G gross-up.

Double-Trigger Vesting Acceleration. All unvested equity held by our named executive officers is subject to double-trigger vesting acceleration.

Director Independence. The Compensation Committee is made up entirely of independent directors.

Independent Compensation Consultant. The Compensation Committee retains an independent compensation consultant to advise on our executive compensation program and practices.

Risk Assessment. The Compensation Committee conducts an annual risk assessment of our executive compensation program.

Risk Avoidance. We avoid compensation program designs that encourage excessive risk taking.

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2017 Annual Meeting Say-On-Pay Vote

At our 2017 annual stockholder meeting, our stockholders approved, on an advisory basis, the compensation of our named executive officers for fiscal year 2016, which included an on-hire compensation package to our CEO in December 2016, with approximately 85% of the votes cast voting in favor of the proposal. The Compensation Committee recognized that stockholder approval for the compensation of our named executive officers for fiscal year 2016 was lower than the approval for fiscal year 2015, which was over 99%, but the Compensation Committee believes that the compensation paid to our CEO in fiscal year 2016 was atypical due to the on-hire compensation package awarded to our new CEO in December 2016. Consistent with our disclosed intentions in our proxy statement for fiscal year 2016, the Compensation Committee did not award our CEO equity compensation in fiscal year 2017 due to the timing and value of his on-hire equity compensation package at the end of 2016 that was intended to provide equity compensation to our CEO for fiscal years 2016 and 2017.

Although the vote is non-binding, the Compensation Committee considered the results of the vote in its review of our executive compensation program. In 2017, we conducted extensive stockholder outreach and engaged with stockholders holding over 75% of our outstanding shares of common stock. Through these engagements, we solicited feedback from our stockholders on our executive compensation, and generally found that stockholders were satisfied with our executive compensation program and executive compensation philosophy.

Based on the level of stockholder support, feedback received from stockholders through our stockholder engagement efforts, and the Compensation Committee's assessment of the efficacy and appropriateness of our executive compensation program, the Compensation Committee did not implement substantial changes to our executive compensation program in 2017, other than our CEO not receiving equity compensation in 2017 due to his on-hire equity compensation package received at the end of 2016. The Compensation Committee will continue to consider the outcome of the Company’s say-on-pay vote when making future compensation decisions for the Company’s named executive officers.

II. Executive Compensation Philosophy and Objectives

Our executive compensation program and pay decisions are based on the philosophy that pay should be competitive and reward our executives for company performance. To maintain pay at competitive levels, the Compensation Committee's general philosophy is to target base salaries and total direct compensation (base salaries, target annual incentives and grant date value of long-term incentives) at levels that approximate the 50th percentile of the market, based on both our peer company and broader market compensation data.

The primary objectives of our executive compensation program are to:

- attract, motivate and retain a highly-skilled team of key executives;
- align the interests of our executives with the interests of our stockholders by tying compensation to the achievement of our short- and long-term strategic, operational and financial goals, which serves to enhance short- and long-term value creation for our stockholders;
- promote the achievement of key strategic, research and development, operational and financial goals by linking compensation to the achievement of measurable performance goals; and
- provide for levels of compensation that are competitive with the market.

To achieve these objectives, the Compensation Committee evaluates our executive compensation program annually and takes into consideration comparable pay at our peer companies and within the broader market, as well as the job scope, responsibilities and individual performance and experience of each executive. We award equity compensation primarily in the form of stock options and restricted stock units, or RSUs, that vest over time, which we believe aligns the interests of our executives with the interests of our stockholders by allowing them to participate in our longer-term success as reflected in the appreciation of our stock price and helps to retain our executives. In the past we have also awarded one-time grants of performance-based RSUs to our executive officers to further promote the achievement of key corporate goals and objectives, including goals and objectives that may only be capable of being achieved over a time period of longer than one year.

III. Market Benchmarks and Competitive Analysis

Each year, the Compensation Committee considers a variety of factors in assessing the competitiveness of our executive compensation program and the individual compensation of each of our executive officers. These factors

include our performance against our internal strategic, operational and financial corporate goals, the mix of short-term cash and long-term equity compensation we provide, and a thorough review of compensation paid at peer companies and within the broader market

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(based on data from Radford's Global Life Science compensation survey) compared to the compensation we pay to our executive officers.

Role of our Chief Executive Officer

Our Chief Executive Officer regularly discusses compensation-related matters with the Chair of the Compensation Committee and meets with the Compensation Committee as a whole to discuss these matters. Our Chief Executive Officer also provides the Compensation Committee and Board of Directors with his evaluation of the performance of our executive officers other than himself.

Role of Compensation Consultant

The Compensation Committee has engaged Radford as its independent compensation consultant. Radford assists the Compensation Committee in the development of a list of our peer companies and collects, analyzes and compares compensation data of such peer companies to the levels and components of our executive compensation program. Using the peer group data provided by Radford and Radford’s broader Global Life Sciences compensation survey data each year, the Compensation Committee determines the compensation of our executive officers with a philosophy of setting base salaries and total direct compensation at approximately the 50th percentile of the market. The Compensation Committee evaluates and considers compensation data from our peer companies as well as broader market survey data described above for each element of compensation to ensure the competitiveness of the compensation packages we provide to our executive officers.

2017 Peer Group

In mid-2016, the Compensation Committee, taking into consideration information provided by Radford, determined our peer companies for the 2017 fiscal year. In determining our peer companies, the Compensation Committee selected publicly-traded companies that generally had the following similarities to our Company:

- Industry
- Market capitalization
- Number of employees
- Scientific stage of development

Based on these criteria, the survey data used by the Compensation Committee included biopharmaceutical companies with a market capitalization of between $400M to $3.8B and with between 50 and 400 employees, and the Compensation Committee determined that our peer group for 2017 compensation comparisons and decisions was as follows:

Achillion Pharmaceuticals, Inc.	Merrimack Pharmaceuticals, Inc.
Agios Pharmaceuticals, Inc.	Neurocrine Biosciences, Inc.
Array BioPharma Inc.	NewLink Genetics Corporation
Celldex Therapeutics	Novavax, Inc.
Clovis Oncology, Inc.	OncoMed Pharmaceuticals, Inc.
Epizyme, Inc.	Ophthotech Corporation
Exelixis, Inc.	Portola Pharmaceuticals, Inc.
FibroGen, Inc.	Puma Biotechnology, Inc.
Kite Pharma, Inc.	Sangamo BioSciences, Inc.
MacroGenics, Inc.	Ultragenyx Pharmaceutical Inc.

Peer Group Changes for 2018 Compensation

In mid-2017, the Compensation Committee, with Radford's input, evaluated and revised the list of peer companies for the 2018 fiscal year, based on changes in the Company’s and individual peer companies' profiles, including market capitalization, employee population, and scientific stage of development. Survey data was updated to reflect our growth and therapeutic area focus, as well as changes in the corporate strategy and stage of development of our peer companies, and included biopharmaceutical companies with a market capitalization of between $400M to $3.6B and with between 50 and 400 employees.

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As a result of this evaluation, the following companies were removed from our peer group for 2018:

- Celldex Therapeutics
- Clovis Oncology, Inc.
- Exelixis, Inc.
- Kite Pharma, Inc.
- Merrimack Pharmaceuticals, Inc.
- Neurocrine Biosciences, Inc.
- NewLink Genetics Corporation
- Novavax, Inc.
- OncoMed Pharmaceuticals, Inc.
- Ophthotech Corporation

In their place, the following companies were determined to be more relevant and were added to our peer group for 2018:

- Achaogen, Inc.
- Aerie Pharmaceuticals, Inc.
- Amicus Therapeutics, Inc.
- Cytokinetics, Inc.
- Global Blood Therapeutics, Inc.
- ImmunoGen, Inc.
- Reata Pharmaceuticals, Inc.
- Sage Therapeutics, Inc.
- TG Therapeutics, Inc.

As a result of these changes, the Compensation Committee determined that our peer group to be used for 2018 compensation comparisons and decisions is as follows:

Achaogen, Inc.	ImmunoGen, Inc.
Achillion Pharmaceuticals, Inc.	MacroGenics, Inc.
Aerie Pharmaceuticals, Inc.	Portola Pharmaceuticals, Inc.
Agios Pharmaceuticals, Inc.	Puma Biotechnology, Inc.
Amicus Therapeutics, Inc.	Reata Pharmaceuticals, Inc.
Array BioPharma Inc.	Sage Therapeutics, Inc.
Cytokinetics, Inc.	Sangamo BioSciences, Inc.
Epizyme, Inc.	TG Therapeutics, Inc.
FibroGen, Inc.	Ultragenyx Pharmaceutical Inc.
Global Blood Therapeutics, Inc.	

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IV. Elements of Executive Compensation

The compensation of our executive officers for fiscal year 2017 consisted primarily of the following elements:

Element	Performance Period	Objective	Features
Fixed Pay			
Base Salary	Annual	Attracts and retains highly skilled executives	Fixed component of pay to provide financial stability, based on responsibilities, experience, individual contributions and peer company data
Annual Short-Term Incentives			
Annual Cash Bonus	Annual	Promotes and rewards the achievement of key short-term strategic, operational and financial goals of the Company as well as individual performance; motivates executives	Variable component of pay based on pre-established annual corporate goals and individual performance
Long-Term Equity Incentives			
Stock Options and Restricted Stock Units	Long-Term	Encourages executives to focus on long-term Company performance; promotes retention of executives; rewards outstanding Company and individual performance	Time-based stock option awards generally vest in equal installments quarterly over a four-year period
		Aligns executives' interests with those of our stockholders and rewards stockholder value creation over the long-term	Time-based restricted stock unit awards generally vest in equal installments annually over a three-year period

Base Salaries

The Compensation Committee annually evaluates and determines base salaries for our named executive officers, taking into consideration a number of factors, including:

- The scope of each executive’s responsibilities;
- Each executive's respective experience and individual contributions to the Company;
- Base salaries paid for comparable positions at our peer companies and within the broader market, determined based on survey data provided by Radford;
- Company performance as a whole; and
- General industry conditions.

In addition, the Compensation Committee considers our Chief Executive Officer's assessment of individual base salary levels for our named executive officers, other than himself. In determining the annual base salaries of each of our named executive officers, the Compensation Committee considers all of the foregoing factors, but does not assign any specific weighting to any factor.

In January 2017, the Compensation Committee evaluated the base salaries of our executive officers, including our named executive officers, for fiscal year 2017, and considered each of the factors described above. Base salary increases for our named executive officers were determined, in large part, based on base salaries paid to executives holding comparable positions at our peer companies and within the broader market and our philosophy of targeting base salary and total direct compensation at approximately the 50th percentile of the market, which reflects both our peer companies and broader market compensation data.

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The annual base salary increases for our named executive officers approved by the Compensation Committee, effective January 1, 2017, were:

Name	2016 Base Salary ($)	2017 Base Salary ($)	% Change
Habib J. Dable	550,000	550,000	0.0 %
Kevin F. McLaughlin	368,113	379,156	3.0 %
Matthew L. Sherman, M.D.	427,450	440,274	3.0 %
John D. Quisel, J.D., Ph.D.	355,396	385,000	8.3 %
Ravindra Kumar, Ph.D.	355,000	365,650	3.0 %
Steven D. Ertel	435,000	448,050	3.0 %

Due to the timing of Mr. Dable's appointment as Chief Executive Officer in December 2016, Mr. Dable was not eligible for an increase in salary for 2017. In determining Mr. Dable's salary in connection with his appointment as our Chief Executive Officer and President, the Compensation Committee considered Mr. Dable's extensive experience in the industry and his executive leadership experience, along with the base salaries paid to chief executive officers at our peer companies and within the broader market, determined based on survey data provided by Radford. Dr. Quisel's annual base salary increase was higher than our other named executive officers in consideration for the additional responsibilities undertaken by Dr. Quisel in 2017 relating to business and corporate development, and targeting base salary at approximately the 50th percentile of the market for Dr. Quisel's expanded role.

Annual Short-Term Incentives

Our annual cash bonus program for our named executive officers and other executives is administered by the Compensation Committee under the Acceleron Pharma Inc. Short-Term Incentive Compensation Plan, or the Incentive Plan. The Incentive Plan promotes and rewards the achievement of key strategic, operational and financial goals.

For fiscal year 2017, the target and maximum annual bonuses as a percentage of base salary for our named executive officers were as follows:

Name	Target	Maximum (150% of Target)
Habib J. Dable	60%	90%
Kevin F. McLaughlin	40%	60%
Matthew L. Sherman, M.D.	40%	60%
John D. Quisel, J.D., Ph.D.	35%	52.5%
Ravindra Kumar, Ph.D.	35%	52.5%
Steven D. Ertel	40%	60%

Based upon the recommendation of the Compensation Committee, the Board of Directors establishes specific corporate performance goals under the Incentive Plan annually that are based on our strategic plan for the year. After the end of the year, the Compensation Committee compares Company performance for the prior year against these corporate goals and makes a recommendation to the Board of Directors on the percentage of the corporate goals that were achieved for such year. The independent members of the Board of Directors then make a final determination on the level of achievement of such goals.

The annual cash bonuses actually paid to each of our named executive officers, other than our Chief Executive Officer, is determined by the Compensation Committee, based primarily on the achievement of our corporate goals as determined by the Board of Directors, subject to adjustment for individual performance as recommended by our Chief Executive Officer. In its sole discretion, the Compensation Committee may, consistent with our stated compensation philosophy and objectives, pay bonuses above or below the amount determined based on the achievement of our corporate goals subject to the annual maximum set by the Committee, or may decide to not award annual bonuses at all, notwithstanding the achievement of particular goals or individual contributions. The Compensation Committee also annually sets the maximum annual bonus payout, which for fiscal year 2017 was up to 150% of each named

executive officer's target annual bonus. Payment of the annual cash bonus to all of our executives, including our Chief Executive Officer, is conditioned on the executive remaining employed by us or providing services to us at the time the bonus is actually paid.

In connection with his transition from Executive Vice President and Chief Operating Officer to Special Advisor to the CEO, Mr. Ertel’s employment agreement with the Company was amended to provide, among other things, that he would no

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longer be entitled to receive an annual bonus, but that he would be paid a one-time bonus for his services in 2017 equal to 50% of his target annual bonus, or 20% of his annual base salary.

2017 Corporate Goals

Each of our corporate goals has a designated weighting. The corporate goals are comprised of key strategic, operational and financial goals relating to clinical development, research, strategic planning, business development, and the achievement of financial objectives. The annual bonuses for fiscal year 2017 were based on our performance relative to the following corporate goals:

Weighting / Category	Goal
(30%) Luspatercept	• Complete enrollment in the MEDALIST phase 3 clinical trial in patients with myelodysplastic syndromes (MDS) • Complete enrollment in the BELIEVE phase 3 clinical trial in patients with beta-thalassemia
(5%) Dalantercept	• Enroll the first patient in a new clinical study • Achieve the primary endpoint in the randomized, placebo-controlled part 2 of the DART trial
(15%) ACE-083	• Fully enroll the first two cohorts in part 1 of the phase 2 clinical trial in patients with facioscapulohumeral dystrophy, or FSHD • Enroll the first patient in the phase 2 clinical trial in patients with Charcot-Marie-Tooth disease, or CMT
(10%) ACE-2494	• Enroll the first patient in a phase 1 healthy volunteer study
(15%) R&D Capabilities	• Initiate IND-enabling development work on one new molecule • Expand capabilities in a new therapeutic area
(10%) Strategic Planning and Business Development	• Deliver a strategic plan to the Board of Directors • Establish a program for enhancing the value of internally discovered therapeutic candidates through partnership by identifying desirable partners and establishing relationships • Establish an in-licensing program for high priority therapeutic areas by identifying and evaluating opportunities to expand the pipeline and establish relationships with potential partners
(15%) Corporate Capabilities, Finance and Investor Relations	• Define the long-range capabilities to support the transition of the Company to a commercial stage organization and to define the strategic hiring and infrastructure plans • Meet the 2017 budget objectives

The Compensation Committee determined that in the event that less than 50% of the corporate goals were achieved, there would be no annual bonus payouts to executive officers. In the event that at least 50% of the goals were achieved, the Committee determined that it would, in its discretion, fund bonuses at a level of 50% to 150% of the percentage of corporate goals achieved, based on factors such as emerging clinical and preclinical data, and the overall performance of the Company in view of changing market conditions.

2017 Performance

In February 2018, the Compensation Committee met and evaluated our performance against the 2017 corporate goals and determined that the following achievements were met:

- Accelerated enrollment in both the phase 3 MEDALIST study and the phase 3 BELIEVE study of luspatercept, leading to guidance of releasing top-line results for both studies by mid-2018.
- Initiation of a phase 2 trial in non-transfusion-dependent beta-thalassemia patients, referred to as the "BEYOND" trial, with luspatercept.
- Accelerated enrollment of the first two cohorts in part 1 of the phase 2 clinical trial with ACE-083 in patients with FSHD.
- Accelerated the timeline for dosing of the first patient in part 1 of the phase 2 clinical trial with ACE-083 in patients with CMT.

- Successfully initiated IND-enabling development work on a new molecule to be developed for clinical trials.
- Expanded internal focus and capabilities into pulmonary disease as a new therapeutic area for Acceleron.

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- Successfully executed on focusing the company strategy and delivering a strategic plan to the Board of Directors outlining Acceleron's new focus on three key therapeutic areas: hematologic, neuromuscular and pulmonary.
- Expanded the internal capabilities and business development function and established in-licensing and out-licensing programs.
- Developed an extensive long-range plan to define internal capabilities to support Acceleron's transition to a commercial organization, including defining strategic hiring and infrastructure plans.
- Successfully maintained budgetary discipline, meeting all financial objectives for the year.

Many of the corporate goals established by the Compensation Committee were significantly overachieved in 2017, as reflected in the accelerated timelines for our phase 3 clinical trials with luspatercept, the accelerated enrollment of our phase 2 clinical trials with ACE-083, and significant progress made on our corporate strategy and business development efforts, most of which was above and beyond the pre-established target achievement level.

In addition to the achievements listed above relating to pre-established corporate goals, the Compensation Committee recognized a number of significant accomplishments in 2017 that provided substantial long-term value to our stockholders. These significant accomplishments that went above and beyond the pre-established goals were as follows:

- Obtained development and commercialization rights from Celgene for a phase 2 clinical asset, sotatercept, in pulmonary hypertension, which provided a flagship therapeutic candidate for a new strategic therapeutic area.
- Publicly announced the intention to initiate an additional phase 3 clinical trial with luspatercept, the "COMMANDS" trial, in first-line, lower-risk MDS patients.
- Published results from the phase 2 study of luspatercept in patients with lower-risk MDS in a well-respected journal, The Lancet Oncology.
- Dramatically increased our stockholder engagement program in 2017, resulting in outreach to Acceleron stockholders holding an aggregate of over 75% of Acceleron's outstanding common stock.
- Successfully completed a public offering of common stock in 2017 that provided us with net proceeds of approximately $215.8 million.

Certain of our pre-established corporate goals for 2017 were not fully achieved. For dalantercept, we did not achieve the primary endpoint in the randomized, placebo-controlled part 2 of the DART trial and discontinued development of dalantercept. Although the primary endpoint was not achieved, the Compensation Committee recognized that the DART trial was a thorough study that allowed the Company to make a clear decision to discontinue development of dalantercept, and the Compensation Committee determined that this goal was partially achieved. For ACE-2494, we did not enroll the first patient in a phase 1 healthy volunteer study in fiscal year 2017, but we made significant progress during fiscal year 2017 and achieved this goal in the first quarter of 2018. Accordingly, the Compensation Committee determined that this goal was partially achieved.

2017 Bonus Payouts

Because at least 50% of the 2017 goals were met, the Compensation Committee was authorized to exercise its discretion to fund bonuses at a level of 50% to 150% of the percentage of corporate goals achieved, based on factors such as emerging clinical and preclinical data, and the overall performance of the Company in view of changing market conditions.

In determining the corporate goals achievement percentage for 2017, the Compensation Committee considered the significant over-achievement of many of the pre-established corporate goals and the outstanding accomplishments beyond such goals as described above, while taking into account the goals relating to dalantercept and ACE-2494 that were partially achieved. After considering such factors, the Compensation Committee approved the achievement of our corporate goals at 140%.

As our CEO, Mr. Dable's performance for 2017 was evaluated by the Compensation Committee and was based solely on the achievement of corporate goals. As a result, the Compensation Committee approved an annual bonus for Mr. Dable at 140% of his target bonus, or 84% of his annual base salary.

For our executives other than Messrs. Dable and Ertel, the Compensation Committee approved a total bonus pool of 140% of the bonus targets for all executives, including our named executive officers. Mr. Dable evaluated the individual performance of each of our executives and recommended to the Compensation Committee the specific

bonuses to be awarded to each executive, including each named executive officer, within the total bonus pool based on a combination of individual performance and the corporate goals achievement.

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Individual performance for our named executive officers was based on a combination of departmental and leadership achievements. An overview of the significant individual achievements of our named executive officers, other than Messrs. Dable and Ertel, in 2017 is as follows:

Name	Significant Individual Achievements
Kevin F. McLaughlin	• Executed a successful public offering of common stock resulting in net proceeds to the company of approximately $215.8 million • Maintained budgetary discipline throughout 2017 and met all financial objectives for 2017 • Served as a key leader among the Company's executives
Matthew L. Sherman, M.D.	• Played an important role working with Celgene to accelerate the enrollment of the MEDALIST and BELIEVE phase 3 clinical studies with luspatercept, to initiate the BEYOND phase 2 clinical trial with luspatercept, and to announce the planned initiation of the COMMANDS phase 3 clinical trial with luspatercept • Successfully initiated two phase 2 clinical studies with ACE-083 in FSHD and CMT • Executed on key hires during 2017 in the clinical department
John D. Quisel, J.D., Ph.D.	• Successfully amended the sotatercept collaboration agreement with Celgene allowing the Company to obtain the rights to develop and commercialize sotatercept in pulmonary hypertension, establishing a flagship therapeutic candidate for the Company's new strategic therapeutic area • Led, with Mr. Dable, the company's internal strategy project to establish a clear and focused corporate strategy focusing on three key therapeutic areas • Contributed to the successful execution of a public offering of common stock • Expanded the internal capabilities and business development function and established in-licensing and out-licensing programs • Served a key role in the Company's internal strategy project
Ravindra Kumar, Ph.D.	• Expanded internal focus and capabilities into pulmonary disease as a new therapeutic area for the Company, which was critical in moving forward on amending the collaboration agreement with Celgene to allow the Company to develop sotatercept in pulmonary hypertension • Successfully progressed a new molecule to allow initiation of IND-enabling development work

Based on the achievement of corporate goals and the individual accomplishments by each of the named executive officers in 2017, our named executive officers received the following annual cash bonuses for 2017:

Name	Target Bonus (% of Base Salary)	Percent of Target Awarded	Bonus Awarded (% of Base Salary)	Bonus Awarded ($)
Habib J. Dable	60%	140%	84%	$462,000
Kevin F. McLaughlin	40%	145%	58%	$219,910
Matthew L. Sherman, M.D.	40%	135%	54%	$237,748
John D. Quisel, J.D., Ph.D.	35%	145%	50.75%	$195,388
Ravindra Kumar, Ph.D.	35%	135%	47.25%	$172,770
Steven D. Ertel(1)	40%	50%	20%	$89,610

(1) Mr. Ertel transitioned from Executive Vice President and Chief Operating Officer to Special Advisor to the Chief Executive Officer effective as of April 28, 2017. In connection with his transition, Mr. Ertel received 50% of his target bonus for services in 2017.

Long-Term Incentives

We grant long-term incentives generally on an annual basis in the form of stock options and restricted stock units, or RSUs, under our 2013 Equity Incentive Plan. We award a mix of stock options and RSUs as part of our annual awards to our named executive officers to increase executive ownership of our shares, provide a balance to stock option grants, which only have value if the stock appreciates, further encourage retention and increase the alignment of the incentives of our executives with the interests of our stockholders. RSUs also provide executives with some certainty regarding the value of the compensation they are receiving during periods of stock market volatility, which furthers our fundamental goal of awarding compensation that helps attract and retain highly skilled employees. In connection with Mr. Dable’s on-hire package when he

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joined us in December 2016, and as a one-time grant to our other named executive officers in 2015, we have awarded performance-based RSUs that are eligible to vest based on the achievement of specified performance goals.

Stock Options and Restricted Stock Units

We award stock options and RSUs to deliver long-term incentive compensation because they directly align executive compensation with the creation of stockholder value, and the ultimate value received from stock options and RSUs depends on stock price appreciation after the grant date. Stock options and RSUs also encourage retention through time-based vesting. Stock option awards to new employees generally vest as to 25% of the shares subject to the option after one year and in equal quarterly installments over the following three years, and stock option awards to existing employees generally vest in quarterly installments over four years, in both cases, generally subject to continued employment. The exercise price of all stock options is equal to the fair market value of our common stock on the grant date, measured as the closing price of our common stock on such date as reported by the NASDAQ Stock Market. RSU awards to our employees generally vest in annual installments over three years, and generally subject to continued employment.

In establishing annual long-term incentive award levels for our named executive officers other than our Chief Executive Officer, and in formulating a recommendation to the Board of Directors on the long-term incentive award to be granted to our Chief Executive Officer, the Compensation Committee evaluates long-term incentives awarded to executives holding comparable positions at our peer companies as well as the broader market survey data provided by Radford. The Compensation Committee and Board of Directors also evaluate overall Company performance over the fiscal year prior to which the awards are granted.

Based on the Compensation Committee's evaluation, the Compensation Committee granted long-term incentive awards to our named executive officers, other than Mr. Dable, in March 2017 as set forth in the table below. Mr. Dable received equity awards as part of his on-hire package when he joined us in December 2016, and these equity awards were intended to provide Mr. Dable with equity compensation for 2016 and 2017. As a result, Mr. Dable did not receive any equity awards in 2017. The table below reflects the long-term incentive awards granted in 2017 in the form of stock options and RSUs to each of our named executive officers other than Mr. Dable, with the value of long-term incentives calculated in the same manner as the value of those awards is calculated in our Summary Compensation Table:

Name	Grant Date	Stock Options Awarded (#)	Stock Options Value ($)	RSUs Awarded (#)	RSUs Value ($)
Habib J. Dable	N/A	—	—	—	—
Kevin F. McLaughlin	2-Mar-17	41,300	756,666	6,900	208,173
Matthew L. Sherman, M.D.	2-Mar-17	47,300	866,593	7,900	238,343
John D. Quisel, J.D., Ph.D.	2-Mar-17	46,300	848,272	7,900	238,343
Ravindra Kumar, Ph.D.	2-Mar-17	41,300	756,666	6,900	208,173
Steven D. Ertel	2-Mar-17	47,300	866,593	7,900	238,343

V. Additional Compensation Policies and Practices

Equity Ownership Guidelines

In September 2015, we adopted Executive Officer Equity Ownership Guidelines, or the Executive Guidelines, and in December 2016, we adopted Non-Employee Director Equity Ownership Guidelines, or the Director Guidelines, which we collectively refer to as the Guidelines. The Guidelines require our executive officers and non-employee directors to acquire and maintain a specified value of equity interests with respect to our common stock. The Guidelines are designed to further align the interests of our executive officers and non-employee directors with those of our stockholders by ensuring that our executive officers and non-employee directors have a meaningful financial stake in the our long-term success. All shares directly or beneficially owned by the executive officer or non-employee director, including the net exercisable value of outstanding vested stock options (where the market price of our common shares exceeds the exercise price of such option) are included in determining the value of equity owned under the Guidelines. Our guidelines are as follows:

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Position	Requirement
Chief Executive Officer	3x base salary
Chief Operating Officer	1.5x base salary
Other executive officers	1x base salary
Non-employee directors	3x annual cash base retainer

Each executive officer and non-employee director is required to achieve the applicable level of equity ownership by the later of the date that is five years after his or her designation as an executive officer or non-employee director, as applicable, or five years after the adoption of the Guidelines.

Annual compliance with the Guidelines is assessed on January 1 of each year and is determined based on each executive officer's salary or non-employee director's annual base cash retainer then in effect. Until the required ownership level is reached, executive officers and non-employee directors are required to retain at least 50% of shares of our common stock, net of applicable tax withholding and the payment of any exercise or purchase price (if applicable), received upon the vesting or settlement of equity awards or the exercise of stock options. Once the requisite level has been achieved, ownership of the guideline amount must be maintained for as long as the individual is subject to the Guidelines.

For all of our executive officers other than Mr. Dable and Mr. Kango, satisfaction of the equity ownership of the Executive Guidelines will become required five years after the Executive Guidelines were adopted, or on September 9, 2020. Mr. Dable was appointed as our President and Chief Executive Officer effective as of December 1, 2016, and Mr. Kango was appointed as our Senior Vice President and Chief Commercial Officer effective as of February 12, 2018, and they each have until five years after their respective start dates to obtain the requisite equity ownership under the Executive Guidelines. In addition, our non-employee directors have until the later of five years after the adoption of the Director Guidelines, which will be December 1, 2021, or five years after the non-employee director was appointed as a director, to obtain the requisite equity ownership under the Director Guidelines.

Anti-Hedging and Pledging Policy

We do not allow any of our executive officers or our directors, to enter into any hedging-type transactions with respect to our stock or to pledge our stock.

Benefits

Our named executive officers receive broad-based benefits that are provided to all employees, including medical insurance, dental insurance, vision insurance, group life insurance, accidental death and dismemberment insurance, long- and short-term disability insurance, flexible spending accounts and matching contributions under our 401(k) plan. Our executive officers are eligible to participate in all of our employee benefit plans on the same basis as our other employees.

Pursuant to our 401(k) plan, employees' elective deferrals are immediately fully vested and non-forfeitable. We may, but are not required to, make discretionary matching contributions and other employer contributions on behalf of eligible employees under this plan. For fiscal year 2017, we matched a portion of eligible employee contributions up to $7,000 pursuant to our 401(k) plan's matching formula.

Employee Stock Purchase Plan

In addition, we maintain our tax-qualified 2013 Employee Stock Purchase Plan, or the ESPP, in which all our employees, including our named executive officers, may participate, subject to the eligibility criteria set forth in the ESPP, consistent with the applicable tax regulations. The purpose of the ESPP is to encourage employees, including our named executive officers, to become our stockholders and better align their interests with those of our other stockholders. None of our named executive officers purchased shares of our common stock under the ESPP in fiscal year 2017.

Employment Agreements

We have entered into employment agreements with each of our named executive officers, which provide for initial base salaries, eligibility to participate in the Company's annual bonus plan, and payments and benefits in connection with certain terminations of employment, including in connection with a change of control. We believe that change of control arrangements provide our executives with security that will likely reduce any reluctance they may have to pursue a change of control transaction that could be in the best interests of our stockholders. We also believe that

reasonable severance and change of control benefits are necessary to attract and retain high-quality executive officers. These agreements are discussed in more

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detail below under "Executive Officer and Director Compensation" in subsections "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Employment Agreements" and "—Potential Payments Upon Termination or Change of Control."

As described above, Mr. Ertel transitioned from Executive Vice President and Chief Operating Officer to the role of Special Advisor to the Chief Executive Officer effective as of April 28, 2017. In connection with this transition, his employment agreement with the Company was amended to provide that Mr. Ertel would receive a bonus for services during 2017 equal to one-half of his annual target bonus amount, or 20% of his annual base salary. In addition, upon termination of Mr. Ertel's employment due to death or termination by the Company due to disability, all of Mr. Ertel's unvested and outstanding equity and equity-based awards would vest in full as of the date of termination and all stock options then held by Mr. Ertel would remain exercisable for the lesser of a period of three years from the date of Mr. Ertel's termination, or the original expiration date of such stock options. In the event of Mr. Ertel's termination due to disability, for one year from the date of termination the Company (i) would pay Mr. Ertel, at the time his base salary would otherwise have been paid, an amount equal to the amount by which 100% of his base salary of $448,050 exceeded any Company-offered disability insurance benefits that he may actually receive, and (ii) would pay or reimburse Mr. Ertel for the full monthly premium cost of any group health plan and/or dental plan under COBRA in which Mr. Ertel is participating at the time of his termination for the twelve months following the date of his termination. On September 21, 2017, Mr. Ertel's employment with the Company terminated due to his disability and he became entitled to the benefits described above under his amended employment agreement.

Tax and Accounting Considerations

Section 162(m) of the Internal Revenue Code generally disallows a tax deduction for any publicly-held corporation for individual compensation exceeding $1 million in any taxable year that is paid to certain executive officers of the corporation. For 2017 and prior years, this deduction limitation did not apply to compensation that qualified as performance-based under Section 162(m). The performance-based compensation exception to Section 162(m) was repealed and certain other changes were made to Section 162(m), generally effective for taxable years beginning after December 31, 2017. As a result, compensation paid to certain current and former executive officers in excess of $1 million in a taxable year generally will not be deductible beginning in 2018 unless such compensation qualifies for transition relief applicable to legally-binding contracts that were in effect on November 2, 2017 or qualifies under a transition rule related to our initial public offering. The Compensation Committee has reviewed our executive compensation program and considers the potential deductibility of the compensation payable under our program, taking into account our current development stage and our existing net operating losses. However, the Compensation Committee believes that its primary responsibility is to provide a compensation program that attracts, retains and rewards the executives necessary for our success. Accordingly, the Compensation Committee has and may continue to, in its judgment, authorize compensation payments that are not deductible Section 162(m) or that may otherwise be limited as to tax deductibility.

The Compensation Committee regularly considers the accounting implications of significant compensation decisions, especially in connection with decisions that relate to our equity incentive award plans and programs. If accounting standards change, we may revise certain programs to appropriately align accounting expenses of our equity awards with our overall executive compensation philosophy and objectives.

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COMPENSATION COMMITTEE REPORT

The Compensation Committee of our Board of Directors has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K, which appears elsewhere in this proxy statement, with our management. Based on this review and discussion, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in our proxy statement and incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2017.

Members of the Acceleron Pharma Inc. Compensation Committee*

Terrence C. Kearney, Chair
Thomas A. McCourt
Karen L. Smith, M.D., Ph.D.
Joseph S. Zakrzewski

*Mr. Kearney was appointed to the Compensation Committee and replaced Mr. Zakrzewski as Chair of the Compensation Committee on March 1, 2018 and did not participate in the decisions of Compensation Committee prior to that date.

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EXECUTIVE OFFICER AND DIRECTOR COMPENSATION

Summary Compensation Table

The following table summarizes the total compensation earned by or paid to our named executive officers for fiscal years 2017, 2016 and if applicable, 2015, including the grant of a one-time performance-based RSU award tied to the achievement of the performance targets over a period of several years granted to Mr. Dable upon his appointment as our new Chief Executive Officer in 2016 and to our other named executive officers in 2015.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)(1)	Option Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)(3)	All Other Compensation ($)	Total ($)
Habib J. Dable(4)	2017	550,000	—	— (5)	— (5)	462,000	310,314 (6)	1,322,314
Chief Executive Officer and President	2016	45,833	350,000(7)	2,200,512(5)	8,522,280(5)	55,000	21,932 (8)	11,195,557
	2015	—	—	—	—	—	—	—
Kevin F. McLaughlin	2017	379,156	—	208,173	756,666	219,910	7,000 (9)	1,570,905
Senior Vice President, Chief Financial Officer and Treasurer	2016	368,113	—	142,647	507,048	147,245	7,000 (9)	1,172,053
	2015	353,275	—	1,243,600	1,030,888	123,646	5,000 (9)	2,756,409
Matthew L. Sherman, M.D.	2017	440,274	—	238,343	866,593	237,748	7,000 (9)	1,789,958
Executive Vice President and Chief Medical Officer	2016	427,450	—	167,820	592,654	170,980	7,000 (9)	1,365,904
	2015	413,033	—	1,430,140	1,407,107	161,886	5,000 (9)	3,417,166
John D. Quisel, J.D., Ph.D.	2017	385,000	—	238,343	866,593	195,388	7,000 (9)	1,692,324
Senior Vice President, Corporate Development, General Counsel and Secretary	2016	355,402	—	142,647	507,048	124,391	7,000 (9)	1,136,488
	2015	345,050	—	1,243,600	1,030,888	120,768	5,000 (9)	2,745,306
Ravindra Kumar, Ph.D.(10)	2017	365,650	—	208,173	756,666	172,770	7,000 (9)	1,510,259
Senior Vice President and Chief Scientific Officer	2016	355,000	—	167,820	599,239	124,250	7,000 (9)	1,253,309
	2015	—	—	—	—	—	—	—
Steven D. Ertel(11)	2017	317,369	89,610 (12)	1,575,606(13)	3,173,215(13)	—	253,324 (14)	5,409,124
Former Executive Vice President and Chief Operating Officer	2016	435,000	—	209,775	740,817	174,000	7,000 (9)	1,566,592
	2015	404,107	—	1,927,580	1,783,327	158,911	5,000 (9)	4,278,925

(1) Amounts shown reflect the grant date fair value of restricted stock units, including performance-based restricted stock units, awarded during fiscal years 2015, 2016 and 2017, as applicable, determined in accordance with the Financial Accounting Standards Board, Accounting Standards Codification Topic 718, Compensation—Stock Compensation. These amounts exclude the value of estimated forfeitures. See Note 11 to our consolidated financial statements for the years ended December 31, 2017, 2016 and 2015 filed with our Annual Report on Form 10-K filed with the SEC on February 27, 2018 for details on the assumptions made in the valuation of these awards.

(2) Amounts shown reflect the grant date fair value of options awarded during fiscal years 2015, 2016 and 2017, as applicable, determined in accordance with the Financial Accounting Standards Board, Accounting Standards Codification Topic 718, Compensation—Stock Compensation. These amounts exclude the value of estimated forfeitures. See Note 11 to our consolidated financial statements for the years ended December 31, 2017, 2016 and 2015 filed with our Annual Report on Form 10-K filed with the SEC on February 27, 2018 for details on the assumptions made in the valuation of these awards.
(3) Amounts shown reflect the annual cash bonus paid to the named executive officer for each of fiscal 2015, 2016 and 2017, as applicable, that was earned based on Company and, for named executive officers other than Mr. Dable, individual performance.
(4) Mr. Dable was appointed as our Chief Executive Officer and President effective as of December 1, 2016.
(5) Mr. Dable's on-hire equity awards in 2016 were intended to serve as his on-hire award and his 2017 annual equity award, and Mr. Dable was not eligible to receive any equity awards in 2017.
(6) Represents matching contributions made under our 401(k) plan in the amount of $7,000 and reimbursement of relocation expenses in the amount of $303,314.
(7) Represents a signing bonus paid in connection with Mr. Dable's appointment as Chief Executive Officer and President.
(8) Represents reimbursements of relocation expenses in the amount of $14,932 and attorneys' fees in connection with Mr. Dable's employment agreement negotiation in the amount of $7,000 paid in 2016.
(9) Represents matching contributions made under our 401(k) plan.
(10) Dr. Kumar was not a named executive officer for fiscal year 2015, and so his compensation for this period has been omitted.
(11) Mr. Ertel transitioned from Executive Vice President and Chief Operating Officer to Special Advisor to the Chief Executive Officer effective as of April 28, 2017, and his employment with the Company terminated on September 21, 2017 due to his disability.
(12) In connection with his transition, Mr. Ertel received 50% of his target bonus for services in 2017.
(13) Includes the incremental fair value associated with the modification of Mr. Ertel's equity awards determined in accordance with the Financial Accounting Standards Board, Accounting Standards Codification Topic 718, Compensation—Stock Compensation, in connection with the amendment to his employment agreement when Mr. Ertel transitioned from Executive Vice President and Chief Operating Officer to Special Advisor to the Chief Executive Officer, as described in more detail under “Potential Payments Upon Termination or Change of Control” below.
(14) Represents the total value of the cash severance and benefit premiums to be received by Mr. Ertel in connection with his termination of employment due to his disability on September 21, 2017, including $33,173 paid to Mr. Ertel in connection with his accrued vacation.

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2017 Fiscal Year Grants of Plan-Based Awards

The following table shows information regarding cash incentive and equity awards granted to our named executive officers during the fiscal year ended December 31, 2017.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards ($)(2)
		Threshold ($)	Target ($)	Maximum ($)				
Habib J. Dable	n/a	165,000	330,000	495,000	—	—	—	—
	3/2/2017	—	—	—	—	41,300	30.17	756,666
Kevin F. McLaughlin	3/2/2017	—	—	—	6,900	—	—	208,173
	n/a	75,831	151,662	227,493	—	—	—	—
	3/2/2017	—	—	—	—	47,300	30.17	866,593
Matthew L. Sherman, M.D.	3/2/2017	—	—	—	7,900	—	—	238,343
	n/a	88,055	176,110	264,165	—	—	—	—
	3/2/2017	—	—	—	—	46,300	30.17	848,272
John D. Quisel, J.D., Ph.D.	3/2/2017	—	—	—	7,900	—	—	238,343
	n/a	67,375	134,750	202,125	—	—	—	—
	3/2/2017	—	—	—	—	41,300	30.17	756,666
Ravindra Kumar, Ph.D.	3/2/2017	—	—	—	6,900	—	—	208,173
	n/a	63,989	127,978	191,966	—	—	—	—
	3/2/2017	—	—	—	—	47,300	30.17	866,593
Steven D. Ertel	3/2/2017	—	—	—	7,900	—	—	238,343
	n/a	—	—	—	—	—	—	3,643,884(3)
	n/a	89,610	179,220	268,830	—	—	—	—

(1) Represents the threshold, target and maximum award amounts applicable to 2017 annual cash bonus awards for each named executive officer under the Incentive Plan. The actual amount of the bonus earned by each named executive officer for 2017 is reported in the Summary Compensation Table in the “Non-Equity Incentive Plan Compensation” column for all named executive officers other than Mr. Ertel. Mr. Ertel’s bonus is reported under “Bonus”.

(2) Represents the aggregate fair value computed as of the grant date of the awards granted under our 2013 Equity Incentive Plan, determined in accordance with the Financial Accounting Standards Board, Accounting Standards Codification Topic 718, Compensation—Stock Compensation, excluding the value of estimated forfeitures. See Note 11 to our consolidated financial statements for the years ended December 31, 2017, 2016 and 2015 filed with our Annual Report on Form 10-K filed with the SEC on February 27, 2018 for details on the assumptions made in the valuation of these awards.

(3) Represents the incremental fair value associated with the modification of Mr. Ertel's equity awards determined in accordance with the Financial Accounting Standards Board, Accounting Standards Codification Topic 718, Compensation—Stock Compensation, in connection with the amendment to his employment agreement when Mr. Ertel transitioned from Executive Vice President and Chief Operating Officer to Special Advisor to the Chief Executive Officer, as described in more detail under “Potential Payments Upon Termination or Change of Control” below.

Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table

Employment Agreements

We have entered into employment agreements with each of our named executive officers, which provide for initial base salaries, eligibility to participate in the Company’s annual bonus plan, and payments and benefits in connection with certain terminations of employment, including in connection with a change of control. Payments and benefits that may be payable in connection with certain terminations of employment are described in more detail under “Potential Payments Upon Termination or Change of Control."

Habib J. Dable. We entered into an employment agreement with Mr. Dable, pursuant to which we agreed to employ Mr. Dable as our Chief Executive Officer and President. Mr. Dable's employment agreement will continue until the agreement is terminated by us or Mr. Dable under the terms of the agreement. Under his employment agreement, he is eligible to receive a base salary, subject to increase by the Board or Compensation Committee, and a performance-based cash bonus each year in an amount targeted at 60% of his annual base salary, which amount is to be based on the achievement of performance goals established by the Board of Directors or the Compensation Committee each fiscal year.

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Kevin F. McLaughlin. We entered into an amended and restated employment agreement with Mr. McLaughlin, pursuant to which we agreed to continue to employ Mr. McLaughlin as our Senior Vice President and Chief Financial Officer. Mr. McLaughlin's employment agreement will continue until the agreement is terminated by us or Mr. McLaughlin under the terms of the agreement. Under his employment agreement, he is eligible to receive a base salary, subject to increase by the Board or the Compensation Committee, and a performance-based cash bonus each year in an amount equal to a percentage of his annual base salary for such year as established by the Board of Directors or the Compensation Committee, which amount is to be based on the achievement of performance goals established by the Board of Directors or the Compensation Committee each fiscal year.

Matthew L. Sherman, M.D. We entered into an amended and restated employment agreement with Dr. Sherman, and Dr. Sherman currently services as our Executive Vice President and Chief Medical Officer. Dr. Sherman's employment agreement will continue until the agreement is terminated by us or Dr. Sherman under the terms of the agreement. Under his employment agreement, he is eligible to receive a base salary, subject to increase by the Board or the Compensation Committee, and a performance-based cash bonus each year in an amount equal to a percentage of his annual base salary for such year as established by the Compensation Committee or Board of Directors, which amount is to be based on the achievement of performance goals established by the Board of Directors each fiscal year.

John D. Quisel, J.D., Ph.D. We entered into an amended and restated employment agreement with Dr. Quisel, and Dr. Quisel currently serves as our Senior Vice President, Corporate Development, General Counsel and Secretary. Dr. Quisel's employment agreement will continue until the agreement is terminated by us or Dr. Quisel under the terms of the agreement. Under his employment agreement, he is eligible to receive a base salary, subject to increase by the Board or the Compensation Committee, and a performance-based cash bonus each year in an amount equal to a percentage of his annual base salary for such year as established by the Compensation Committee or Board of Directors, which amount is to be based on the achievement of performance goals established by the Board of Directors each fiscal year.

Ravindra Kumar, Ph.D. We entered into an employment agreement with Dr. Kumar, and Dr. Kumar currently servces as our Senior Vice President and Chief Scientific Officer. Dr. Kumar's employment agreement will continue until the agreement is terminated by us or Dr. Kumar under the terms of the agreement. Under his employment agreement, he is eligible to receive a base salary, subject to increase by the Board or the Compensation Committee, and a performance-based cash bonus each year under in an amount equal to a percentage of his annual base salary for such year as established by the Compensation Committee or Board of Directors, which amount is to be based on the achievement of performance goals established by the Board of Directors each fiscal year.

Steven D. Ertel. We entered into an amended and restated employment agreement with Mr. Ertel, which was amended on April 28, 2017 in connection with Mr. Ertel's transition from serving as our Executive Vice President and Chief Operating Officer to a Special Advisor to the Chief Executive Officer. Pursuant to the amendment, Mr. Ertel received a bonus for services during 2017 equal to one-half of his target annual bonus, or 20% of his annual base salary, and ceased to be eligible to receive any other bonus.

The employment agreements with our named executive officers also contain severance and change of control benefits. For a description and quantification of benefits payable to the executive officers in connection with a termination of employment or a change of control pursuant to these arrangements, see "—Potential Payments Upon Termination or Change of Control."

Equity Awards

In 2017, we granted our named executive officers other than Mr. Dable options to purchase our common stock and restricted stock units. Due to the timing and value of Mr. Dable's on-hire equity compensation in December 2016, Mr. Dable was not eligible to receive any annual equity awards in 2017. For a description of these equity awards, see the discussion above in "Compensation Discussion and Analysis—Elements of Executive Compensation—Long-Term Incentives."

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Outstanding Equity Awards at 2017 Fiscal Year-End

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

Name	Number of Securities Underlying Unexercised Options Exercisable (#)		Number of Securities Underlying Unexercised Options Unexercisable (#)		Option Exercise Price ($)(1)	Option Expiration Date (2)	Number of Shares or Units of Stock That Have Not Vested (#)		Market Value of Shares or Units of Stock That Have Not Vested ($)(3)
Habib J. Dable	—		—		—	—	62,800	(4)	2,665,232
	100,000	(5)	300,000	(5)	35.04	12/1/2026	—		—
	—		—		—	—	24,000	(4)	1,018,560
Kevin F. McLaughlin	—		—		—	—	3,400	(6)	144,296
	—		—		—	—	6,900	(6)	292,836
	6,251	(5)	—		3.88	12/2/2020	—		—
	6,250	(7)	—		5.28	12/16/2021	—		—
	29,000	(7)	—		24.11	12/5/2023	—		—
	28,188	(7)	12,812	(7)	41.20	1/8/2025	—		—
	13,475	(7)	17,325	(7)	27.97	3/3/2026	—		—
	7,744	(7)	33,556	(7)	30.17	3/2/2027	—		—
	—		—		—	—	27,600	(4)	1,171,344
Matthew L. Sherman, M.D.	—		—		—	—	4,000	(6)	169,760
	—		—		—	—	7,900	(6)	335,276
	29,000	(7)	—		24.11	12/5/2023	—		—
	28,188	(7)	12,812	(7)	41.20	1/8/2025	—		—
	10,313	(7)	4,687	(7)	41.01	3/4/2025	—		—
	15,750	(7)	20,250	(7)	27.97	3/3/2026	—		—
	8,869	(7)	38,431	(7)	30.17	3/2/2027	—		—
	—		—		—	—	24,000	(4)	1,018,560
John D. Quisel, J.D., Ph.D.	—		—		—	—	3,400	(6)	144,296
	—		—		—	—	7,900	(6)	335,276
	5,000	(7)	—		3.88	12/2/2020	—		—
	2,346	(7)	—		5.28	12/16/2021	—		—
	1,562	(7)	—		7.12	12/12/2022	—		—
	15,329	(7)	—		24.11	12/5/2023	—		—
	8,125	(7)	1,875	(7)	34.05	7/1/2024	—		—
	28,188	(7)	12,812	(7)	41.20	1/8/2025	—		—
	13,475	(7)	17,325	(7)	27.97	3/3/2026	—		—
	8,681	(7)	37,619	(7)	30.17	3/2/2027	—		—
Ravindra Kumar, Ph.D.	—		—		—	—	24,000	(4)	1,018,560
	—		—		—	—	4,000	(6)	169,760
	—		—		—	—	6,900	(6)	292,836
	3,624	(7)	—		24.11	12/5/2023	—		—
	28,188	(7)	12,812	(7)	41.20	1/8/2025	—		—

	11,375	(7)	20,475	(7) 27.97	3/3/2026	—	—
	7,744	(7)	33,556	(7) 30.17	3/2/2027	—	—
Steven D. Ertel	1,883	(7)	—	5.28	12/16/2021	—	—
	12,500	(7)	—	7.12	12/12/2022	—	—
	12,273	(7)	—	24.11	12/5/2023	—	—
	41,000	(7)	—	41.20	1/8/2025	—	—
	30,000	(7)	—	41.01	3/3/2025	—	—
	39,375	(7)	—	27.97	3/3/2026	—	—
	47,300	(7)	—	30.17	3/2/2027	—	—

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(1) The exercise price of the stock options was not less than the fair market value of a share of our common stock on the date of grant, as determined by the Board of Directors based, in part, on an independent third party valuation with respect to the period prior to our initial public offering. Stock options granted subsequent to us becoming a public company were granted with an exercise price equal to the closing price of a share of our common stock on the date the stock option was granted.
(2) All stock options have a 10-year term measured from the date of grant.
(3) The market value of the stock awards is determined by multiplying the number of shares subject to the award by $42.44, which was the closing price of our common stock on December 29, 2017, the last trading day of the fiscal year.

(4) Reflects performance-based restricted stock units, or PSUs, that will vest upon the achievement of certain time- and performance-based conditions. For Mr. Dable, no PSUs are eligible to vest until December 1, 2018 and the PSUs that are earned based on any performance-based milestones achieved before December 1, 2018 will vest on December 1, 2018, generally subject to Mr. Dable's continued employment. For all of our named executive officers, any PSUs that have not vested based on the achievement of performance-based milestones will vest on September 9, 2019, generally subject to the executive's continued employment.
(5) Reflects time-based options to purchase shares of our common stock, vesting as to 25% of the shares subject to the option on the first anniversary of the vesting commencement date and thereafter in equal quarterly

installments over the following three years, generally subject to the executive's continued employment.
(6) Reflects time-based restricted stock units underlying shares of our common stock that vest in equal annual installments over three years generally subject to the executive's continued employment.
(7) Reflects time-based options to purchase shares of our common stock that vest in equal quarterly installments over four years, generally subject to the executive's continued employment.

Option Exercises and Stock Vested in 2017

The table below sets forth the number of shares acquired and the value realized upon the exercise of stock options and vesting of restricted stock units during fiscal year 2017 by each of our named executive officers.

	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)(2)
Habib J. Dable	—	—	—	—
Kevin F. McLaughlin	31,900	766,618	17,700	647,628
Matthew L. Sherman, M.D.	8,000	199,040	20,400	745,918
John D. Quisel, J.D., Ph.D.	—	—	17,700	647,628
Ravindra Kumar, Ph.D.	20,763	377,277	18,000	655,270
Steven D. Ertel	22,352	199,354	77,400	2,756,389

(1) The value realized upon exercise is the difference between the fair value of our common stock at the time of exercise and the

exercise price, multiplied by the number of shares acquired on exercise.

(2) The value realized upon vesting is the fair value of our common stock at the time of vesting multiplied by the number of shares acquired on vesting.

Pension Benefits

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

Nonqualified Deferred Compensation

We do not have any non-qualified defined contribution plans or other deferred compensation plans.

Potential Payments Upon Termination or Change of Control

Pursuant to the employment agreements between the Company and each of our named executive officers, each named executive officer is entitled to payments and benefits upon certain terminations of the executive's employment and/or a change of control, as described below. We believe that change of control arrangements provide our executives with security that will likely reduce any reluctance they may have to pursue a change of control transaction that could be in the best interests of our stockholders. We also believe that reasonable severance and change of control benefits are necessary in order to attract and retain high-quality executive officers.

The table below reflects, as applicable, cash severance, option acceleration, RSU acceleration, and continuation of health benefits payable to each of our named executive officers other than Mr. Ertel in connection with (1) a change of control of the Company, (2) the termination of the executive's employment without cause or for good reason following a change of control, (3) the termination of the executive's employment without cause or for good reason (other than following a change of control), and (4) the termination of the executive's employment due to his death or disability; in each case, assuming that the triggering event took place on December 31, 2017, and based on the closing stock price of our common stock on December 29, 2017, the last trading day of fiscal year 2017 ($42.44 per share). For Mr. Ertel, the table reflects the value of cash severance, option

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acceleration, RSU acceleration and continuation of health benefits actually received by Mr. Ertel in connection with his termination of employment due to his disability on September 21, 2017.

Name and Benefit	Change of Control ($)	Termination Without Cause or for Good Reason Following a Change of Control ($)	Termination Without Cause or for Good Reason ($)	Termination Due to Death or Disability ($)	
Habib J. Dable					
Cash Severance	1,320,000		825,000	—	
Option Acceleration	2,220,000	(1)	—	—	
RSU Acceleration	(2) 2,665,232	(1)	1,332,616	(3) —	
Health Benefits	36,149		36,149	—	
Kevin F. McLaughlin					
Cash Severance	530,819		379,156	127,156	(4)
Option Acceleration	678,312	(1)	—	—	
RSU Acceleration	(2) 1,455,692	(1)	—	—	
Health Benefits	24,100		24,100	—	
Matthew L. Sherman, M.D.					
Cash Severance	616,384		440,274	188,274	(4)
Option Acceleration	757,155	(1)	—	—	
RSU Acceleration	(2) 1,676,380	(1)	—	—	
Health Benefits	1,951		1,951	—	
John D. Quisel, J.D., Ph.D.					

Cash Severance	519,750	385,000	133,000	(4)
Option Acceleration	743,896	(1) —	—	
RSU Acceleration	(2) 1,498,132	(1) —	—	
Health Benefits	23,941	23,941	—	
Ravindra Kumar, Ph.D.				
Cash Severance	493,628	365,650	113,650	(4)
Option Acceleration	723,892	(1) —	—	
RSU Acceleration	(2) 1,481,156	(1) —	—	
Health Benefits	24,100	24,100	—	
Steven D. Ertel				
Cash Severance	—	—	196,050	(5)
Option Acceleration	—	—	420,928	(6)
RSU Acceleration	—	—	1,756,005	(7)
Health Benefits	—	—	24,100	

(1) The value of acceleration of stock options is calculated based on the difference between the closing price of our common stock on December 29, 2017, the last trading day of fiscal year 2017 ($42.44 per share), and the exercise price of stock options multiplied by the number of unvested stock options that vest in connection with a termination of employment. The value of acceleration of RSUs is calculated based on the closing price of our common stock on December 29, 2017 multiplied by the number of unvested RSUs that vest in connection with a termination of employment.

(2) Assumes the performance-based restricted stock units, or PSUs, are continued, assumed or substituted for upon a change of control.

(3) Reflects the value of the PSUs that have been earned based on the achievement of certain performance goals but that are unvested because no PSUs awarded to Mr. Dable would otherwise vest until the two-year anniversary of Mr. Dable's PSU grant date, or December 1, 2018. The value of acceleration of PSUs is calculated based on the closing price of our common stock on December 29, 2017

multiplied by the number of unvested PSUs that vest in connection with a termination of employment.

(4) Cash severance represents the amount by which 100% of the executive's annual base salary exceeds that which would be paid to the executive pursuant to the Company's long-term disability insurance benefits for one year. This cash severance is paid by the Company only in the event of an executive's disability, and not in the event of an executive's death.

(5) Amounts shown for Mr. Ertel reflect the total cash severance payments that Mr. Ertel will receive in connection with the termination of his employment due to disability on September 21, 2017, as described in further detail below.

(6) The value of the acceleration of Mr. Ertel's stock options is calculated based on the difference between the closing price of our common stock on the date of Mr. Ertel's termination of employment and the exercise price of Mr. Ertel's stock options that vested in connection with his termination.

(7) The value of the acceleration of Mr. Ertel's RSUs is calculated based on the closing price of our common stock on the date of Mr. Ertel's termination of employment multiplied by the number of shares that Mr. Ertel acquired upon the vesting of his RSUs in connection with his termination.

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Change of Control. Although the employment agreements for Drs. Sherman and Quisel and Mr. McLaughlin provide for the vesting of 25% of the unvested stock options granted prior to the date of each executive's employment agreement upon a change of control, as of December 31, 2017, all of the stock options to which this acceleration would apply were fully vested in accordance with their terms. As a result, the provision in these executives' employment agreements providing for partial acceleration of vesting upon a change of control is no longer in effect. Each of our named executive officers other than Mr. Dable received one-time performance-based restricted stock units in 2015, which Mr. Dable received in 2016 in connection with his on-hire compensation package, and which we refer to as the PSUs. In the event that the PSUs are not continued, assumed or substituted for in connection with a change of control, all outstanding and unvested PSUs will vest immediately upon the change of control.

All stock options and RSUs granted to our named executive officers are subject to double-trigger vesting acceleration, as described below under "Termination of Employment Without Cause or for Good Reason Following a Change of Control."

Change of control is defined under the employment agreements with our named executive officers and in the PSU award agreements generally as (i) the acquisition of beneficial ownership, directly or indirectly by any person, of our securities representing a majority or more of the combined voting power of our then outstanding securities, other than an acquisition of securities for investment purposes pursuant to a bona fide financing; (ii) a merger or consolidation with any other corporation in which our holders of voting securities prior to the merger or consolidation do not own more than 50% of the total voting securities of the surviving corporation; or (iii) the sale or disposition of all or substantially all of our assets.

Termination of Employment Without Cause or for Good Reason Following a Change of Control. For our named executive officers other than Mr. Ertel, if, within one year after the consummation of a change of control, the executive's employment is terminated by us (or our successor) other than for cause or the executive terminates his employment for good reason (as such terms are defined in the executive's employment agreement): (1) we will pay the executive a lump sum payment equal to the product of 1.5 times in the case of Mr. Dable, or one times in the case of Drs. Sherman, Quisel and Kumar and Mr. McLaughlin, the sum of (x) executive's then-current annual base salary plus (y) 100% of the executive's target bonus for the year in which the termination occurs, (2) 100% of any unvested equity awards (including any PSUs that were continued or assumed in connection with the change of control) held by the executive at the time of such termination will fully vest, and (3) if the executive elects under COBRA or any successor law to continue participation in our group health and/or dental plans in which the executive was participating prior to such termination, we will pay or, at our option reimburse the executive for, the full premium cost of that participation for 18 months in the case of Mr. Dable, or 12 months in the case of Drs. Sherman, Quisel and Kumar and Mr. McLaughlin, following the date the executive's employment terminates or, if earlier, until the date the executive becomes eligible to enroll in such plans of a new employer.

Termination of Employment Without Cause or for Good Reason. For our named executive officers other than Mr. Ertel, if the executive's employment is terminated by us other than for cause or the executive terminates his employment for good reason (as such terms are defined in the executive's employment agreement) under circumstances other than as described in the preceding paragraph: (1) we will continue to pay the executive his base salary for a period of 18 months in the case of Mr. Dable, or 12 months in the case of Drs. Sherman, Quisel and Kumar and Mr. McLaughlin, in accordance with our payroll practices, (2) prior to the second anniversary of the grant date of the PSUs, any PSUs that have been earned as of such date of termination based on the achievement of the applicable performance goals, as certified by our Compensation Committee, will vest upon such termination, and (3) if the executive elects under COBRA or any successor law to continue participation in our group health and/or dental plans in which the executive was participating prior to such termination, we will pay or, at our option reimburse the executive for, the full premium cost of that participation for 18 months in the case of Mr. Dable, or 12 months in the case of Drs. Sherman, Quisel and Kumar and Mr. McLaughlin.

Termination of Employment Due to Death or Disability. For Drs. Sherman, Quisel and Kumar and Mr. McLaughlin, (1) if the executive's employment terminates due to the executive's death or disability, then all unvested stock options then held by the executive that were granted on or prior to the effective date of the executive's employment agreement will vest as of the date of termination, and (2) in the event we terminate the executive's employment due to disability,

to the extent we do not maintain a disability plan providing for continuation of the executive's base salary for one year following the date of such termination, during this period we will pay the executive, at the time the executive's base salary would otherwise have been paid, an amount equal to the excess of 100% of the executive's base salary over the disability insurance benefits, if any, actually paid to the executive. Although the employment agreements for Drs. Sherman and Quisel and Mr. McLaughlin provide for the vesting of unvested stock options granted prior to the date of each executive's employment agreement if the executive's employment terminates due to the executive's death or disability termination, as of December 31, 2017, all of the stock options to which this acceleration would apply were fully vested in accordance with their terms. As a result, the provision in these executives' employment agreements providing for acceleration is no longer in effect.

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Mr. Ertel's employment agreement was amended effective as of April 28, 2017 in connection with his transition from Executive Vice President and Chief Operating Officer to Special Advisor to the CEO due to Mr. Ertel's diagnosis of ALS. The amendment provided Mr. Ertel with certain benefits in the event that Mr. Ertel's employment terminated due to his death or disability. On September 21, 2017, Mr. Ertel's employment was terminated due to his disability, and as a result, all of Mr. Ertel's unvested and outstanding equity awards vested in full as of the date of termination and all stock options then held by Mr. Ertel will remain exercisable for three years from the date of Mr. Ertel's termination of employment, or, if sooner, the original expiration date of such stock options. In addition, for one year from the date of termination we (i) will pay Mr. Ertel, at the time his base salary would otherwise have been paid, an amount equal to the amount by which 100% of his base salary exceeds any Company-offered disability insurance benefits that he actually receives, and (ii) will pay or reimburse Mr. Ertel for the full monthly premium cost of any group health plan and/or dental plan under COBRA in which Mr. Ertel was participating at the time of his termination for the twelve months following the date of his termination by the Company.

Severance Subject to Release of Claims and Compliance With Restrictive Covenants. Our obligation to provide our named executive officers with any severance payments or other benefits under the employment agreement is conditioned on the executive signing an effective release of claims in our favor and the executive's continued full performance of his obligations under the Employee Confidentiality, Non-Competition and Proprietary Information Agreement relating to confidentiality, non-competition and non-solicitation.

Section 280G. The employment agreements with our executives provide that if a change in ownership or control occurs and any portion of the payments made pursuant to the employment agreement or otherwise constitutes an excess parachute payment under Section 280G of the Internal Revenue Code of 1986, as amended, then the executive will be entitled to receive an amount of such payments reduced so that no portion of the payments would constitute an excess parachute payment, or the amount otherwise payable to the executive under the employment agreement or otherwise reduced by all applicable taxes, including the excise tax, whichever amount results in the greater amount payable to the executive.

Pay Ratio Disclosure

Pursuant to Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 402(u) of Regulation S-K, we are required to disclose the ratio of the annual total compensation of our principal executive officer to the median of the annual total compensation of all of our employees other than our principal executive officer. During fiscal 2017, our principal executive officer was our President and Chief Executive Officer, Habib Dable. For 2017, the annual total compensation for Mr. Dable, as reported in the Summary Compensation Table, was $1,322,314, and the annual total compensation for our median employee was $158,210, resulting in an estimated pay ratio of approximately 8:1. As noted above, Mr. Dable did not receive any equity awards during 2017 and his annual total compensation for future years is expected to be higher because he is expected to receive grants of equity awards in future years.

In accordance with Item 402(u) of Regulation S-K, we identified the median employee as of October 1, 2017 by aggregating for each employee employed on this date (i) annual base salary for salaried employees or wages multiplied by estimated work schedule for hourly employees, (ii) target incentive compensation for 2017, and (iii) estimated accounting value of any equity awards granted during 2017. We chose this as our consistently applied compensation measure because we believed it was representative of employee compensation at Acceleron. We then ranked this compensation measure for our employees from lowest to highest. This calculation was performed for all of our employees who were employed on October 1, 2017, excluding Mr. Dable. At the end of fiscal year 2017, we calculated the final fiscal year 2017 total compensation for the previously selected median employee and this employee's compensation was determined to be anomalous due to a one-time equity award granted to the median employee. Accordingly, we exercised discretion permitted by SEC rules to select an alternate median employee, whose compensation was viewed to be more representative of employees at or near the median. The selected employee was located immediately below the previously selected median employee. Once we selected the median employee, we calculated this employee’s compensation in the same manner as we calculated Mr. Dable’s compensation for purposes of the Summary Compensation Table.

The pay ratio reported above is a reasonable estimate calculated in a manner consistent with SEC rules based on our internal records and the methodology described above. The SEC rules for identifying the median compensated employee and calculating the pay ratio based on that employee's annual total compensation allow companies to adopt a variety of methodologies, to apply certain exclusions, and to make reasonable estimates and assumptions that reflect their employee populations and compensation practices. Accordingly, the pay ratio reported by other companies may not be comparable to the pay ratio reported above, as other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates and assumptions in calculating their own pay ratios.

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Director Compensation

Our non-employee director compensation policy is designed to provide a total compensation package that enables us to attract and retain, on a long-term basis, high caliber non-employee directors. Under the policy for 2017, all non-employee directors were eligible to receive cash compensation as set forth below, prorated for any partial year of service:

	2017 Annual Retainer
Board of Directors:	
All non-employee members	$40,000
Additional retainer for Chair of the Board of Directors	$35,000
Audit Committee:	
Chair	$20,000
Non-Chair members	$10,000
Compensation Committee:	
Chair	$15,000
Non-Chair members	$7,500
Nominating and Corporate Governance Committee:	
Chair	$10,000
Non-Chair members	$5,000

Under our non-employee director compensation policy for 2017, each person who is initially appointed or elected to the Board of Directors is eligible to receive an option to purchase 20,000 shares of our common stock under our 2013 Equity Incentive Plan on the date he or she first becomes a non-employee director, which will vest quarterly in equal installments over a three-year period, generally subject to the non-employee director's continued service. In addition, each continuing non-employee director is eligible to receive an annual option grant to purchase 7,500 shares of our common stock and an annual award of 1,250 restricted stock units, in each case, which will vest in full on the first anniversary of the grant date, generally subject to the non-employee director's continued service. The annual equity awards are prorated when granted to any non-employee director who becomes a non-employee director during the fiscal year, based on the portion of the fiscal year that the director served on the Board of Directors. A person initially appointed as the Chair of the Board of Directors is eligible to receive an additional option to purchase 10,000 shares of our common stock, which will vest quarterly over three years after the date of grant, generally subject to the non-employee director's continued service. All options granted to members of the Board of Directors are granted with an exercise price equal to the fair market value of a share of our common stock on the date of grant. We also reimburse each member of the Board of Directors who is not an employee for reasonable travel and other expenses in connection with attending meetings of the Board of Directors.

In March 2017, pursuant to our non-employee director compensation policy, each of our non-employee directors, other than Drs. Smith and Golumbeski, received an option to purchase 7,500 shares of our common stock and 1,250 restricted stock units. These equity awards will vest in full on the first anniversary of the grant date, generally subject to the non-employee director's continued service. In November 2017, in connection with Dr. Smith's appointment to the Board of Directors, we granted her an option to purchase 20,000 shares of our common stock. This stock option vests quarterly over the three years after the date of grant, generally subject to Dr. Smith's continued service.

The annual stock options and restricted stock units granted in March 2017 to members of the Board of Directors other than Drs. Smith and Golumbeski each had a grant date fair value of $132,578 and $37,713, respectively, and the stock options granted to Dr. Smith upon her appointment to the Board of Directors in November 2017 had a grant date fair value of $421,220. These values were determined in accordance with the Financial Accounting Standards Board, Accounting Standards Codification Topic 718, Compensation-Stock Compensation, excluding the effect of estimated forfeitures.

The following table sets forth information concerning the cash compensation earned by our directors during 2017 and equity granted in 2017. Mr. Dable, as an employee-director, and Dr. Golumbeski, pursuant to policy of Celgene

Corporation, each received no additional compensation for service as a director, and, consequently, are not included in this table. The compensation received by Mr. Dable as an employee during 2017 is included in the "Summary Compensation Table" above.

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Name	Fees Paid in Cash ($)(1)	Stock Awards (2) (3)	Option Awards ($)(2)(3)	Total ($)
Jean M. George	60,000	37,713	132,578	230,290
Terrence C. Kearney	60,000	37,713	132,578	230,290
Tom Maniatis, Ph.D.	47,500	37,713	132,578	217,790
Thomas A. McCourt(4)	47,500	16,443	57,839	121,782
Terrance G. McGuire(5)	45,001	37,713	132,578	215,291
Francois Nader, M.D.	75,000	37,713	132,578	245,290
Richard F. Pops	45,001	37,713	132,578	215,291
Karen L. Smith, M.D., Ph.D.(5)	6,116	—	421,220	427,336
Joseph S. Zakrzewski	65,000	37,713	132,578	235,290

(1) Amounts represent annual cash compensation for services rendered by each member of the Board of Directors.

(2) See table below.

(3) Amounts shown reflect the grant date fair value of stock options and restricted stock units awarded during fiscal 2017, determined in accordance with the Financial Accounting Standards Board, Accounting Standards Codification Topic 718, Compensation—Stock Compensation. These amounts exclude the value of estimated forfeitures. See Note 11 to our consolidated financial statements for the year ended December 31, 2017, 2016 and 2015 filed with our Annual Report on Form 10-K filed with the SEC on February 27, 2018 for details on the assumptions made in the valuation of these awards.

(4) Mr. McCourt received prorated equity awards in 2017 due to his appointment to the Board of Directors during 2016.

(5) Mr. McGuire resigned from the Board of Directors and Dr. Smith was appointed to the Board of Directors effective as of November 15, 2017.

The following table sets forth the aggregate number of exercisable and unexercisable option awards and the number of restricted stock units held by our non-employee directors that were outstanding as of December 31, 2017:

Name	Number of Stock Options Held at Fiscal Year-End		Number of Shares or Units of Stock That Have Not Vested
	Exercisable (#)	Unexercisable (#)	
Jean M. George	40,000	7,500	1,250
George Golumbeski, Ph.D.	—	—	—
Terrence C. Kearney	34,665	7,500	1,250
Tom Maniatis, Ph.D.	67,500	7,500	1,250
Thomas A. McCourt	8,333	15,484	545
Terrance G. McGuire	47,500	—	—

Francois Nader, M.D.	38,909	9,167	1,250
Richard F. Pops	90,000	7,500	1,250
Karen L. Smith, M.D., Ph.D.	—	20,000	—
Joseph S. Zakrzewski	58,750	7,500	1,250

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Equity Compensation Plan Information

The following table provides certain aggregate information with respect to all of our equity compensation plans in effect as of December 31, 2017:

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights(2)	(b) Weighted-average exercise price of outstanding options, warrants and rights(3)	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))	
Equity compensation plans approved by security holders(1)	4,117,136	$ 28.74	2,949,614	(4)
Equity compensation plans not approved by security holders	—	—	—	
Total	4,117,136	$ 28.74	2,949,614	

(1) These plans consist of our 2013 Equity Incentive Plan, or our 2013 Plan, our 2003 Stock Option and Restricted Stock Plan, or our 2003 Plan, and our 2013 Employee Stock Purchase Plan, or our 2013 ESPP. Our 2013 Plan was adopted in September 2013 and our 2003 Plan expired in December 2013, and thereafter no further stock options were granted under the 2003 Plan. All outstanding stock options granted under the 2003 Plan as of the 2003 Plan expiration date remained outstanding and subject to their terms and the terms of the 2003 Plan.

(2) Represents shares underlying outstanding stock options and restricted stock units.

(3) Restricted stock units have no exercise price and, therefore, the weighted average exercise price does not take outstanding restricted stock units into account.

(4) Represents 2,762,770 shares of common stock available for future issuance under our 2013 Plan and 186,844 shares of common stock available for future issuance under our 2013 ESPP. Our 2013 Plan contains an "evergreen provision" which allows for an annual increase in the number of shares available for issuance under the plan on the first day of each of our fiscal years during the period beginning on January 1, 2014 and ending on the January 1, 2023. The annual increase in the number of shares shall be equal to the lesser of (i) 3,150,000 shares; (ii) 4% of our outstanding shares on the first day of the fiscal year; and (iii) an amount determined by the Board of Directors.

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AUDIT COMMITTEE REPORT

The Audit Committee has reviewed the audited consolidated financial statements of Acceleron for the year ended December 31, 2017 and has discussed these statements with management and Ernst & Young LLP, or Ernst & Young, the Company's independent registered public accounting firm. Acceleron management is responsible for the preparation of the Company's financial statements and for maintaining an adequate system of disclosure controls and procedures and internal control over financial reporting for that purpose. The independent registered public accounting firm audits the annual consolidated financial statements prepared by management, expresses an opinion as to whether those consolidated financial statements present fairly the consolidated financial position, results of operations and cash flows of Acceleron Pharma Inc. in conformity with U.S. generally accepted accounting principles and discusses any issues they believe should be raised with us. The Audit Committee is responsible for providing independent, objective oversight of the Company's accounting functions and internal controls. The Audit Committee also reviewed management’s report on its assessment of the effectiveness of the Company’s internal control over financial reporting and the independent registered public accounting firm’s report on the effectiveness of the Company’s internal control over financial reporting as of December 31, 2017.

The Audit Committee also received from, and discussed with, Ernst & Young the written disclosures and other communications that the Company's independent registered public accounting firm is required to provide to the Audit Committee, including the matters required to be discussed by Statement on Auditing Standards No. 61, as amended (Communication with Audit Committees), as adopted by the Public Company Accounting Oversight Board, or PCAOB, in Rule 3200T, which we refer to as SAS 61.

Ernst & Young also provided the Audit Committee with the written disclosures and the letter required by Rule 3526 of the PCAOB. PCAOB Rule 3526 requires independent registered public accounting firms annually to disclose in writing all relationships that in their professional opinion may reasonably be thought to bear on independence, to confirm their perceived independence and engage in a discussion of independence. The Audit Committee has reviewed this disclosure and has discussed with Ernst & Young their independence from Acceleron.

Based on its discussions with management and our independent registered public accounting firm, and its review of the representations and information provided by management and our independent registered public accounting firm, the Audit Committee recommended to the Board of Directors that the audited consolidated financial statements be included in the Acceleron Annual Report on Form 10-K for the year ended December 31, 2017, for filing with the Securities and Exchange Commission.

Members of the Acceleron Pharma Inc. Audit Committee*

Joseph S. Zakrzewski, Chair
Jean M. George
Terrence C. Kearney
Thomas A. McCourt

*Mr. Zakrzewski replaced Mr. Kearney as Chair of the Audit Committee on March 1, 2018. Mr. McCourt was appointed to the Audit Committee on March 1, 2018 and did not participate in the decisions of the Audit Committee prior to that date.

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SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our executive officers and directors and persons who own more than 10% of a registered class of our equity securities to file initial reports of ownership and reports of changes in ownership with the SEC. Such persons are required by regulation of the SEC to furnish us with copies of all Section 16(a) forms they file. Based solely on our review of the copies of such forms or written representations from certain reporting persons received by us with respect to fiscal year 2017, we believe that our executive officers and directors and persons who own more than 10% of a registered class of our equity securities have complied with all applicable filing requirements, other than Forms 4 that were filed late on March 14, 2017 for Messrs. Ertel, McLaughlin, Kearney, McCourt, McGuire, Pops and Zakrzewski, and Drs. Kumar, Maniatis, Nader, Quisel and Sherman, and Ms. George in connection with annual equity awards that were granted on March 2, 2017.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Except as described below, there have been no transactions since January 1, 2017 in which we were a party, the amount involved exceeded or will exceed $120,000, and in which any related person had a direct or indirect material interest.

Amended and Restated Collaboration, License and Option Agreement

On September 18, 2017, we entered into an Amended and Restated Collaboration, License and Option Agreement (the “Sotatercept Agreement”) with Celgene Corporation (affiliated with our director George Golumbeski) that amended and restated our existing Collaboration, License and Option Agreement with Celgene Corporation, dated as of February 20, 2008 and amended as of August 2, 2011, related to the development of our therapeutic candidate, sotatercept, as well as the investigation and development of other protein-based product candidates incorporating ActRIIA. For a complete description of the terms of the Sotatercept Agreement, please refer to the section entitled "Business–Our Strategic Partnerships" in our Annual Report on Form 10-K, filed with the SEC on February 27, 2018.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and executive officers. These agreements will require us to indemnify these individuals and, in certain cases, affiliates of such individuals, to the fullest extent permissible under Delaware law against liabilities that may arise by reason of their service to us or at our direction, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

Registration Rights Agreement

In connection with our Series F preferred stock financing, on December 22, 2011, we entered into an amended and restated registration rights agreement with the holders of all of our then-outstanding shares of preferred stock including entities with which certain of our directors are affiliated. These entities that are parties to the agreement consist of Polaris Venture Partners IV, L.P. (affiliated with our former director Terrance G. McGuire), Advanced Technology Ventures and related funds (affiliated with our director Jean M. George), and Celgene (affiliated with our director George Golumbeski). The agreement provides that these holders, for so long as they may hold registrable securities, as defined in the agreement, have the right to demand that we file a registration statement with respect to the common stock issued upon conversion of our preferred stock. These holders may also request that shares of common stock held by them be included in certain registration statements that we are otherwise filing.

Related Party Transactions Policy

We have adopted a related party transactions policy that governs the review and approval of related party transactions. Pursuant to this policy, if we want to enter into a transaction with a related party or an affiliate of a related party, our General Counsel will review the proposed transaction to determine, based on applicable NASDAQ and SEC rules, if such transaction requires pre-approval by the Audit Committee and/or Board of Directors. If pre-approval is required, such matters will be reviewed at the next regular or special Audit Committee and/or Board of Directors meeting. We may not enter into a related party transaction unless our General Counsel has either specifically confirmed that no further reviews are necessary or that all requisite corporate reviews have been obtained.

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PROPOSAL NO. 1—ELECTION OF DIRECTORS

In accordance with the Company's certificate of incorporation and bylaws, the Board of Directors is divided into three classes of approximately equal size. The members of each class are elected to serve a three-year term with the term of office of each class ending in successive years. Habib J. Dable, Terrence C. Kearney, and Karen L. Smith, M.D., Ph.D. are the Class II directors whose terms expire at the Company's 2018 Annual Meeting of stockholders. Each of Mr. Dable, Mr. Kearney, and Dr. Smith has been nominated for and has agreed to stand for re-election to the Board of Directors to serve as a Class II director of the Company for three years and until their successors are duly elected and qualified or until their earlier death, resignation or removal.

Our bylaws provide for a majority voting standard for the election of directors in uncontested elections, which provides that to be elected, a director nominee must receive a greater number of votes FOR his or her election than votes AGAINST his or her election. The number of votes cast with respect to that director’s election excludes abstentions and broker non-votes with respect to that director’s election. In contested elections where the number of director nominees exceeds the number of directors to be elected, the voting standard will be a plurality of the shares present in person or by proxy and entitled to vote.

It is intended that, unless you give contrary instructions, shares represented by proxies will be voted for the election of the three nominees listed above as director nominees. Acceleron has no reason to believe that any nominee will be unable to serve. In the event that one or more nominees is unexpectedly not available to serve, proxies may be voted for another person nominated as a substitute by the Board of Directors, or the Board of Directors may reduce the number of directors to be elected at the Annual Meeting. Information relating to each nominee for election as director and for each continuing director, including his or her period of service as a director of Acceleron, principal occupation and other biographical material is shown earlier in this proxy statement.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE "FOR" EACH OF THESE NOMINEES FOR CLASS II DIRECTOR, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

(PROPOSAL 1 ON YOUR PROXY CARD)

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PROPOSAL NO. 2—ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are seeking your advisory vote as required by Section 14A of the Securities Exchange Act of 1934, as amended, on the approval of the compensation of our named executive officers as described in the Compensation Discussion and Analysis, the compensation tables and related material contained in this proxy statement. Because your vote is advisory, it will not be binding on the Compensation Committee or the Board of Directors. However, the Compensation Committee and the Board will review the voting results and take them into consideration when making future decisions regarding executive compensation

Our compensation philosophy is designed to align each executive's compensation with our short-term and long-term performance and to provide the compensation and incentives needed to attract, motivate and retain key executives who are critical to our long-term success. Consistent with this philosophy, a significant portion of the total compensation opportunity for each of our executives is directly related to performance factors that measure our progress against our strategic, operational and financial performance goals, as well as our performance against that of our peer companies.

Stockholders are urged to read the Compensation Discussion and Analysis section of this proxy statement, which discusses how our compensation policies and procedures implement our compensation philosophy. The Compensation Committee and the Board of Directors believe that these policies and procedures are effective in implementing our compensation philosophy and in achieving our goals.

For the reasons discussed above, the Board of Directors unanimously recommends that stockholders vote in favor of the following resolution:

“RESOLVED, that the compensation paid to the named executive officers of Acceleron Pharma Inc., as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the compensation tables and the related material disclosed in this proxy statement, is hereby APPROVED.”

Although the say-on-pay vote we are asking you to cast is non-binding, the Board of Directors and Compensation Committee value the views of our stockholders and will consider the outcome of the vote when determining future compensation arrangements for our named executive officers. The resolution will be approved, on an advisory basis, if the votes cast FOR exceed the votes cast AGAINST the proposal. Abstentions and broker non-votes will have no effect on the voting of this proposal. We will hold an advisory vote to approve the compensation of our named executive officers annually until the next vote on the advisory frequency of such advisory votes, which will occur no later than our 2021 Annual Meeting of Stockholders.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE "FOR" APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION PAID TO OUR NAMED EXECUTIVE OFFICERS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH APPROVAL UNLESS A STOCKHOLDER INDICATES OTHERWISE ON THE PROXY.

(PROPOSAL 2 ON YOUR PROXY CARD)

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PROPOSAL NO. 3—RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We are asking our stockholders to ratify the Audit Committee's selection of Ernst & Young LLP, or Ernst & Young, as our independent registered public accounting firm for the fiscal year ending December 31, 2018. The Audit Committee is directly responsible for the appointment, compensation, retention and oversight of Ernst & Young, and Ernst & Young has served as our independent registered public accounting firm since 2005.

The Audit Committee annually reviews the independent registered public accounting firm's independence, including reviewing all relationships between the independent registered public accounting firm and us and any disclosed relationships or services that may impact the objectivity and independence of the independent registered public accounting firm, and the independent registered public accounting firm's performance. Although ratification is not required by our bylaws or otherwise, the Board of Directors is submitting the selection of Ernst & Young to our stockholders for ratification as a matter of good corporate practice. If the selection is not ratified, the Audit Committee will consider whether it is appropriate to select another independent registered public accounting firm. Even if the selection is ratified, the Audit Committee in its discretion may select a different registered public accounting firm at any time during the year if the committee determines that such a change would be in the best interests of the Company and our stockholders. To assure continuing auditor independence, the Audit Committee periodically considers whether there should be a regular rotation of our independent external audit firm. In addition, in conjunction with the mandated rotation of Ernst & Young's lead engagement partner, the Audit Committee is directly involved with the selection of Ernst & Young's new lead engagement partner. The Audit Committee believes that the continued retention of Ernst & Young to serve as our independent external auditor is in the best interests of the Company and our stockholders.

We expect that a representative of Ernst & Young will attend the Annual Meeting and the representative will have an opportunity to make a statement if he or she so chooses. The representative will also be available to respond to appropriate questions from stockholders.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

The Audit Committee pre-approves all auditing services, internal control related services and permitted non-audit services (including the fees and terms thereof) to be performed by Ernst & Young, subject to the de minimis exception for non-audit services that are approved by the Audit Committee prior to the completion of an audit. The Audit Committee may delegate pre-approval authority to one or more members of the Audit Committee consistent with applicable law and listing standards, provided that the decisions of such Audit Committee member or members must be presented to the full Audit Committee at its next scheduled meeting. The Audit Committee is responsible for the audit fee negotiations associated with our retention of Ernst & Young,

Principal Accountant Fees and Services

We regularly review the services and fees of our independent registered public accounting firm. These services and fees are also reviewed by the Audit Committee on an annual basis. The aggregate fees billed for the fiscal years ended December 31, 2017 and 2016 for each of the following categories of services are as follows (in thousands):

Fee Category	2017	2016
Audit Fees	$807	$735
Audit-Related Fees	$11	$—
Tax Fees	$22	$21
All Other Fees	$2	$2
Total Fees	$842	$758

Audit Fees. Consist of aggregate fees for professional services provided in connection with the annual audit of our consolidated financial statements and the effectiveness of our internal control over financial reporting, the review of our quarterly condensed consolidated financial statements, consultations on accounting matters directly related to the audit, and comfort letters, consents and assistance with and review of documents filed with the SEC.

Audit-Related Fees. Consist of aggregate fees for accounting consultations and other services that were reasonably related to the performance of audits or reviews of our consolidated financial statements and were not reported above under "Audit Fees."

Tax Fees. Consist of aggregate fees for tax compliance, tax advice and tax planning services including the review and preparation of our federal and state income tax returns.

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All Other Fees. Consist of aggregate fees billed for products and services provided by the independent registered public accounting firm other than those disclosed above.

The Audit Committee pre-approved all services performed since the pre-approval policy was adopted.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE "FOR" THE RATIFICATION OF THE SELECTION OF ERNST & YOUNG LLP AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH RATIFICATION UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

(PROPOSAL 3 ON YOUR PROXY CARD)

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GENERAL MATTERS

Code of Business Conduct and Ethics and Corporate Governance Guidelines

We have adopted a Code of Business Conduct and Ethics for our directors, officers and employees, including our Chief Executive Officer and President and our Chief Financial Officer. A copy of our Code of Business Conduct and Ethics may be accessed free of charge by visiting our website at www.acceleronpharma.com and going to the "Corporate Governance" tab under the "Investors/Media" section, or by requesting a copy in writing from our Secretary at our Cambridge, Massachusetts office. We intend to post on our website any amendment to, or waiver under, a provision of the Code of Business Conduct and Ethics that applies to our directors and certain of our executive officers within four business days following the date of such amendment or waiver.

A copy of the Corporate Governance Guidelines may also be accessed free of charge by visiting the website at www.acceleronpharma.com and going to the "Corporate Governance" tab under the "Investors/Media" section, or by requesting a copy in writing from our Secretary at our Cambridge, Massachusetts office.

Availability of Certain Documents

A copy of our 2017 Annual Report on Form 10-K has been posted on the Internet along with this proxy statement. Upon written request, we will mail, without charge, a copy of our 2017 Annual Report on Form 10-K excluding exhibits. Please send a written request to our Corporate Secretary at:

Acceleron Pharma Inc.
128 Sidney Street
Cambridge, MA 02139
Attention: Secretary
Phone: (617) 649-9200

SEC rules concerning the delivery of annual disclosure documents allow us or your broker to send a single Notice or, if applicable, a single set of our proxy materials to any household at which two or more of our stockholders reside, if we or your broker believe that the stockholders are members of the same family, unless we have received contrary instructions from one or more of the stockholders. This practice, referred to as “householding,” benefits both you and us. It reduces the volume of duplicate information received at your household and helps to reduce our expenses. The rule applies to our Notices, annual reports, proxy statements and information statements.

We will undertake to deliver promptly, upon written or oral request, a separate copy to a stockholder at a shared address to which a single copy of the Notice or proxy materials was delivered. You may make a written or oral request by sending a notification to our Secretary at the address or telephone number above, providing your name, your shared address, and the address to which we should direct the additional copy of the Notice or proxy materials. Multiple stockholders sharing an address who have received one copy of a mailing and would prefer us to mail each stockholder a separate copy of future mailings should contact us at our principal executive offices. Additionally, if current stockholders with a shared address received multiple copies of a mailing and would prefer us to mail one copy of future mailings to stockholders at the shared address, notification of that request may also be made through our principal executive offices. Stockholders who participate in householding will continue to have access to and utilize separate proxy voting instructions.

Stockholder Proposals and Nominations

Requirements for Stockholder Proposals to be Considered for Inclusion in our Proxy Materials. To be considered for inclusion in next year's proxy statement, stockholder proposals must be received by our Secretary at our principal executive offices no later than the close of business on December 14, 2018, which is 120 days prior to the date that is one year from this year’s mailing date of April 13, 2018.

Requirements for Stockholder Proposals or Director Nominations to be Brought Before an Annual Meeting. Our bylaws provide that, for stockholder nominations to the Board of Directors or other proposals to be considered at an annual meeting, the stockholder must have given timely notice thereof in writing to the Secretary at Acceleron Pharma Inc., 128 Sidney Street, Cambridge, MA 02139. The nominating and corporate governance committee does not have a written policy regarding stockholder nominations, but has determined that it is the practice of the committee to consider candidates proposed by stockholders if made in accordance with our bylaws. To be timely for the 2019 annual meeting, although not included in the proxy statement, the stockholder's notice must be delivered to

or mailed and received by us not earlier than the close of business on the 120th day nor later than the close of business on the 90th day prior to the anniversary date of the prior year's annual meeting, except that if the annual meeting is set for a date that is not within 30 days before or after such anniversary date, we must receive the notice not later than the close of business on the tenth day following the day on which we first

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provide notice or public disclosure of the date of the meeting. Assuming the date of our 2018 annual meeting is not so advanced or delayed, stockholders who wish to make a proposal at the 2019 annual meeting must notify us no earlier than February 6, 2019 and no later than March 8, 2019. Such notice must provide the information required by our bylaws with respect to each matter the stockholder proposes to bring before the 2019 annual meeting.

Contacting the Board of Directors

Stockholders wishing to communicate with the Board of Directors may do so by writing to the Board or to the non-employee members of the Board as a group, at:

Acceleron Pharma Inc.
128 Sidney Street
Cambridge, MA 02139
Attention: Secretary

The communication must prominently display the legend "BOARD COMMUNICATION" in order to indicate to the Secretary that it is a communication for the Board. Upon receiving such a communication, the Secretary will promptly forward the communication to the relevant individual or group to which it is addressed. Certain items that are unrelated to the Board's duties and responsibilities may be excluded, such as spam, junk mail and mass mailings, resumes and other forms of job inquiries, surveys and business solicitations or advertisements. The Secretary will not forward any communication determined in his good faith belief to be frivolous, unduly hostile, threatening, illegal or similarly unsuitable.

Other Matters

As of the date of this proxy statement, the Board of Directors does not intend to present any matters other than those described herein at the Annual Meeting and is unaware of any matters to be presented by other parties. If other matters are properly brought before the meeting for action by the stockholders, proxies will be voted in accordance with the recommendation of the Board or, in the absence of such a recommendation, in accordance with the judgment of the proxy holder.

Directions to Annual Meeting

Directions to the 2018 Annual Meeting of Stockholders, to be held at Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, MA 02199 are set forth below:

From North of Boston: From Route 93 take exit 26, Leverett Connector/Storrow Drive, and follow to the Copley Square exit on the left. Take a right onto Beacon Street and follow to Exeter Street. Take a left onto Exeter Street and follow 11 blocks. Take a right on Huntington Avenue. The Prudential Center Garage will be on the right.

From West of Boston: Follow the Mass Pike eastbound into Boston (the Mass Pike is accessible from Route 128/I-95). Get off at exit 22, Copley Square/Prudential Center. Follow signs for Prudential Center. This will take you directly to the Prudential Center Garage entrance, which will be on your right.

From South of Boston: From Route 93 take exit 18, Massachusetts Avenue. Follow sign to Massachusetts Avenue and turn right. Follow Massachusetts Avenue for about 2 miles to Huntington Avenue. Take a right on Huntington Avenue. Take a left on Belvidere Street. The Prudential Center garage entrance will be on your right before Sovereign Bank.

From Logan Airport: Access Boston via the Sumner Tunnel and exit onto Route 93 North. Take exit 26, Leverett Connector/Storrow Drive, and follow to the Copley Square exit on the left. Take a right onto Beacon Street and follow to Exeter Street. Take a left onto Exeter Street and follow 11 blocks. Take a right on Huntington Avenue. The Prudential Center Garage will be on the right.

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Parking: The Prudential Tower is best accessed via the South Garage, which has two entrances on Huntington Avenue, one on Dalton Street and one on Belvedere Street. The Red and Yellow levels are both part of the South Garage. Attendant parking is available on both levels at no additional charge.

By Order of the Board of Directors

Habib J. Dable
Chief Executive Officer, President and Director
April 13, 2018