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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

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under §240.14a-12

AMAG PHARMACEUTICALS, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies: _____
 - (2) Aggregate number of securities to which transaction applies: _____
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): _____
 - (4) Proposed maximum aggregate value of transaction: _____
 - (5) Total fee paid: _____
- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount Previously Paid: _____
 - (2) Form, Schedule or Registration Statement No.: _____
 - (3) Filing Party: _____
 - (4) Date Filed: _____

PRELIMINARY PROXY STATEMENT—SUBJECT TO COMPLETION



AMAG PHARMACEUTICALS, INC.

1100 Winter Street
Waltham, Massachusetts 02451

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On [· ·], 2020

The 2020 Annual Meeting of Stockholders of AMAG Pharmaceuticals, Inc. (the "Annual Meeting") will be held on [· ·], [· ·], 2020, at [· ·], local time. The annual meeting will be held entirely online this year due to the emerging public health impact of the coronavirus outbreak (COVID-19). You will be able to attend and participate in the annual meeting online by visiting www.virtualshareholdermeeting.com/AMAG2020, where you will be able to vote electronically and submit questions. You will not be able to attend the annual meeting in person. You will need the 16-digit control number on your proxy card to attend the virtual annual meeting. At this annual meeting, you will be asked to consider and act upon the following matters:

- (1) To elect the nine nominees nominated by our Board of Directors named herein to the Board of Directors to serve until the next annual meeting of stockholders and until their successors have been elected and qualified;
- (2) To approve a stock option exchange program, pursuant to which non-executive employees may exchange eligible stock options for new stock options with an exercise price equal to the fair market value of the Company's common stock at the time of the exchange;
- (3) To approve a stock option exchange program, pursuant to which certain executive employees may exchange eligible stock options for new stock options with an exercise price equal to the fair market value of the Company's common stock at the time of the exchange;
- (4) To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in this proxy statement; and
- (5) To transact such other business as may properly come before the Annual Meeting or any adjournments or postponements thereof.

Proposal 1 relates solely to the election of nine directors nominated by the Board of Directors and does not include any other matters relating to the election of directors, including without limitation, the election of directors nominated by any of our stockholders.

Only stockholders of record at the close of business on [· ·], 2020, the record date for the Annual Meeting, are entitled to notice of, and will be entitled to vote at, the Annual Meeting or any adjournments or postponements thereof.

As always, we urge you to vote via the Internet at www.proxyvote.com or by telephone by following the instructions on the enclosed proxy card, or by signing, voting and returning your proxy card to Broadridge Financial Solutions, 51 Mercedes Way, Edgewood, New York 11717.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read "J. Vittiglio", with a long horizontal line extending to the right.

Joseph D. Vittiglio
Secretary

Waltham, Massachusetts
April [·], 2020

Whether or not you expect to attend the Annual Meeting online, please promptly complete your proxy by Internet, telephone or mail as indicated above in order to assure representation of your shares. If completing a proxy by mail, no postage need be affixed if the proxy is mailed in the United States. Do not send any certificates with your proxy. Even if you have voted by proxy, you may still vote during the meeting electronically if you attend the Annual Meeting online. Please note, however, that if your shares are held of record by a broker, bank, custodian or other nominee and you wish to vote at the Annual Meeting online, you must obtain a proxy issued in your name from that record holder. Please refer to the enclosed form for instructions.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held online on [·], 2020, at [·], Eastern Time:

This Proxy Statement and Notice, the Proxy Card, and AMAG's 2019 Annual Report to Stockholders and any other proxy materials are available free of charge at www.amagpharma.com under the heading "Investors."

AMAG PHARMACEUTICALS, INC.
PROXY STATEMENT
FOR THE ANNUAL MEETING OF STOCKHOLDERS
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AMAG PHARMACEUTICALS, INC.

1100 Winter Street
Waltham, Massachusetts 02451

**PROXY STATEMENT
FOR THE ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON [·], 2020**

QUESTIONS AND ANSWERS ABOUT THIS PROXY MATERIAL AND VOTING

The Annual Meeting

Our Board of Directors (the "Board") is soliciting your proxy to vote at the 2020 Annual Meeting of Stockholders of AMAG Pharmaceuticals, Inc. (the "Annual Meeting") to be held online on [·], [·], 2020, at [·], local time, and at any adjournments or postponements of the Annual Meeting. This Proxy Statement explains the agenda, voting information and procedures for the Annual Meeting. Please read it carefully. This Proxy Statement and the accompanying proxy card were first mailed to our stockholders on or about [·], 2020.

At the Annual Meeting, the following proposals will be subject to a vote of our stockholders: (1) to elect the following nine nominees, nominated by our Board, to serve as directors, each to hold office until the next annual meeting and until his or her successor is elected and qualified, or until his or her earlier resignation or removal: William K. Heiden, John A. Fallon, M.D., Paul Fonteyne, David Johnson, Kathrine O'Brien, Anne M. Phillips, M.D., FRCPC, Gino Santini, Davey S. Scoon and James R. Sulat; (2) to approve a stock option exchange program, pursuant to which employees may exchange eligible stock options for new stock options with an exercise price equal to the fair market value of the Company's common stock at the time of the exchange (the "Non-Executive Option Exchange Program"); (3) to approve a stock option exchange program, pursuant to which certain executive employees may exchange eligible stock options for new stock options with an exercise price equal to the fair market value of the Company's common stock at the time of the exchange (the "Executive Option Exchange Program"); and (4) an advisory vote on the compensation of our named executive officers.

In this Proxy Statement, references to "Company," "AMAG," "we," "us," or "our" mean AMAG Pharmaceuticals, Inc. Any reference in this Proxy Statement to information found on our website, www.amagpharma.com, is for information purposes only and does not incorporate such information by reference into this Proxy Statement.

Who Is Entitled To Attend And Vote At The Annual Meeting?

Only stockholders of record at the close of business on [·], 2020, the record date (the "Record Date") for the Annual Meeting, are entitled to attend and vote at the Annual Meeting. On the Record Date, there were [·] shares of common stock outstanding and entitled to vote.

If on the Record Date your shares were registered directly in your name with our transfer agent/registrar, American Stock Transfer & Trust Company, then you are a stockholder of record. As a stockholder of record, you may vote electronically during the Virtual Annual Meeting or by proxy as described below.

If on the Record Date your shares were held through a broker, bank, custodian or other nominee (each, a "Nominee"), then you are the beneficial owner of shares held in "street name" and these proxy materials are being forwarded to you by that Nominee. Only your Nominee can vote your shares, but you have the right to give specific instructions to your Nominee regarding how to vote your shares

at the Annual Meeting. Please follow the instructions for voting by proxy provided by your Nominee. You are also invited to attend the Virtual Annual Meeting.

How Many Votes Do I Have?

Each stockholder is entitled to one vote for each share of our common stock held by such stockholder on the Record Date.

How Do I Vote?

If you are a stockholder of record, you may vote online at the Annual Meeting or by proxy by following the instructions on the enclosed proxy card. Whether or not you plan to attend the Annual Meeting online, we urge you to vote by telephone or Internet as instructed in the enclosed proxy card, or by completing, signing and dating the enclosed proxy card and returning it in the envelope provided. No postage is required if your proxy card is mailed in the United States. You may still attend the Annual Meeting online and vote during the meeting electronically even if you have already voted by proxy. If you plan to attend the Annual Meeting online, go to www.virtualshareholdermeeting.com/AMAG2020. Have your 16-digit control number from your proxy card available and follow the instructions on the site.

If you are a beneficial owner of shares registered in the name of your Nominee, you should have received a proxy card and voting instructions with these proxy materials from that organization. Simply follow the instructions for voting provided by your Nominee to ensure that your vote is counted. You may still attend the Annual Meeting online and vote during the meeting electronically even if you have already voted by proxy. However, if your shares are held in the name of your Nominee, to attend the meeting and vote your shares electronically during the Annual Meeting online, you must have your 16-digit control number from your broker.

We encourage you to access the Annual Meeting before it begins. Online check-in will start shortly before the meeting on [· ·], 2020. If you encounter any difficulties accessing the virtual Annual Meeting during the check-in or meeting time, please call the technical support number that will be posted on the virtual shareholder meeting log-in page. Technical support will be available starting at [· ·] Eastern Daylight Time on [· ·], 2020.

The persons named as attorneys-in-fact in the enclosed proxy card, Edward Myles and Joseph D. Vittiglio, were selected by the Board and are officers of AMAG. All properly executed proxies submitted in time to be counted at the Annual Meeting will be voted by such persons at the Annual Meeting. Where a choice has been specified in such proxy with respect to the foregoing matters, the shares represented by the proxy will be voted in accordance with the specifications. **If no such specifications are indicated, such proxies will be voted FOR each of the director nominees identified in Proposal 1, FOR Proposal 2 (the approval of the Non-Executive Option Exchange Program), FOR Proposal 3 (the approval of the Executive Option Exchange Program), and FOR Proposal 4 (the advisory vote on the compensation of our named executive officers).**

If any other matter should be presented at the Annual Meeting upon which a vote properly may be taken, shares represented by proxy will be voted in accordance with the judgment of the persons named in such proxy. At present, the Board knows of no other matters to be presented at the Annual Meeting.

How Many Votes Are Required To Approve Each Proposal?

For Proposal 1, the election of nine directors, each nominee shall be elected as a director if the votes cast for such nominee's election exceed the votes cast against such nominee's election (*i.e.*, a majority of the votes cast). Our Corporate Governance Guidelines provide that if an incumbent

director is not elected by a majority of votes cast, the Governance and Risk Committee shall promptly consider his or her resignation, and make a recommendation to the Board as to whether to accept or reject the resignation, or whether other action should be taken. The Board will act on the Governance and Risk Committee's recommendation within 30 days following certification of the stockholder vote.

For each of Proposal 2 (the approval of the Non-Executive Option Exchange Program), Proposal 3 (the approval of the Executive Option Exchange Program), and Proposal 4 (the advisory vote on the compensation of our named executive officers), the vote of the holders of at least a majority of shares of common stock present or represented and voting on the matter at the Annual Meeting is required for approval (*i.e.*, a majority of the votes cast). For non-routine matters, broker non-votes (discussed below) are not considered to have been voted "For" or "Against" a particular proposal and therefore have no effect on Proposals 1, 2, 3 or 4. Similarly, abstentions are not counted as voting on a matter and thus will have no effect on any of the Proposals.

When a quorum is present at any meeting of stockholders, the holders of a majority of the stock present or represented and voting on a matter shall decide any matter to be voted upon by the stockholders at such meeting, except when a different vote is required by express provision of law, our certificate of incorporation or our by-laws. At present, the Board knows of no other matters to be presented for stockholder action at the Annual Meeting.

What Does It Mean If I Receive More Than One Proxy Card?

If you receive more than one proxy card, your shares may be registered in more than one name or are registered in different accounts. Please complete, sign, date, and return all proxy cards or vote by Internet or telephone as instructed on such proxy cards to be sure that all of your shares are voted.

Can I Change My Vote After I Deliver My Proxy?

Yes. You may change your vote at any time before the final vote at the Annual Meeting. If you are the record holder of your shares, you may revoke your proxy in any one of four ways:

- Duly completing a later-dated proxy relating to the same shares and delivering it before the taking of the vote at the Annual Meeting.
- Properly casting a new vote via the Internet or by telephone at any time before the closure of the Internet or telephone voting facilities.
- Delivering written notice to us before the taking of the vote at the Annual Meeting that you are revoking your proxy. Such notice should be sent to our principal executive offices at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Secretary.
- Attending the Annual Meeting online and voting during the meeting electronically. Simply attending the meeting online will not, in itself, revoke your proxy.

If you wish to revoke a delivered proxy and your shares are held by a Nominee, you should follow the revocation instructions provided by that Nominee.

What Are "Broker Non-Votes" And What Discretion Does My Broker Have To Vote My Shares Held In "Street Name"?

Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the Nominee holding the shares. Under national securities exchange rules, if the beneficial owner does not provide voting instructions, the Nominee can still vote the shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. A broker non-vote occurs when a Nominee holding the shares for a beneficial owner votes on one proposal but does not vote on another proposal because, with respect to such other proposal, the

Nominee does not have discretionary voting power and has not received instructions from the beneficial owner as to how to vote such shares.

Pursuant to applicable stock exchange rules, (a) the election of directors, (b) the approval of the Non-Executive Option Exchange Program, (c) the approval of the Executive Option Exchange Program and (d) the advisory vote on compensation paid to our named executive officers, are considered non-routine matters. For non-routine matters, brokers do not have authority, discretionary or otherwise, to vote your shares unless they receive proper instructions to do so from you in a timely manner. If you hold your shares in street name, we strongly encourage you to submit your proxy by following the instructions provided by your Nominee and exercise your right to vote as a stockholder as promptly as possible.

What Constitutes A Quorum At The Annual Meeting?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if the holders of at least a majority of the shares of common stock issued and outstanding and entitled to vote on the Record Date are present at the Annual Meeting, either online or represented by proxy. On the Record Date, there were [·] shares of our common stock outstanding and entitled to vote.

Abstentions and broker non-votes are counted as present or represented for purposes of determining the presence or absence of a quorum for the Annual Meeting. If there is no quorum, the chairman of the meeting or the holders of a majority of shares present at the Annual Meeting, present online or represented by proxy, may adjourn the meeting to another date.

What Materials Should I Be Receiving In Connection With The Annual Meeting?

Our Annual Report, including audited financial statements for the year ended December 31, 2019, is being mailed to you along with this Proxy Statement and Notice. This Proxy Statement and the accompanying Notice and proxy card were first mailed to our stockholders on or about [·], 2020.

This Proxy Statement and Notice, the Proxy Card, and AMAG's 2019 Annual Report to Stockholders and any other proxy materials are also available free of charge at www.amagpharma.com under the heading "Investors."

If you share an address with any of our other stockholders, your household might receive only one copy of the Notice and Proxy Statement and Annual Report. To request individual copies of any of these materials for each stockholder in your household, please contact our Investor Relations Department by telephone at (617) 498-3300 or by post at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Investor Relations. We will deliver copies of the Notice and Proxy Statement and/or Annual Report promptly following your telephonic or mailed request. You may also contact Broadridge Financial Solutions, Inc. ("Broadridge") or your bank, broker or other custodian to request individual copies of any of these materials for each stockholder in your household. To ask that only one copy of any of these materials be mailed to your household, please contact your broker. For additional details on this practice (referred to as "householding") please see the discussion below under "*Delivery of Documents to Stockholders Sharing an Address.*"

How Are We Soliciting Proxies And Tabulating Votes?

We will bear all costs of solicitation of proxies. In addition to these proxy materials, our directors, officers and employees, without additional remuneration, may also solicit proxies through telephone, e-mail and in-person conversations. We will also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

We have engaged Innisfree M&A Incorporation ("Innisfree") to assist with the solicitation of proxies. Please contact Innisfree with any inquiries:

Innisfree M&A Incorporated
501 Madison Avenue, 20th Floor
New York, NY 10022
Stockholders may call toll-free: (877) 750-0926
Banks and Brokers may call collect: (212) 750-5833

Votes will be tabulated by Broadridge.

How Can I Find Out The Results Of The Voting At The Annual Meeting?

Preliminary voting results will be announced online at the Annual Meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the Annual Meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an amended Form 8-K to publish the final results.

When Are Stockholder Proposals And Director Nominations Due For Next Year's Annual Meeting?

To be considered for inclusion in next year's proxy materials, stockholder proposals (other than director nominations, which can only be submitted as described below) must be submitted in writing to our principal executive offices at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Secretary and must be received by us no later than [·], 2020. Proposals must satisfy the requirements and procedures set forth in Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

If you wish to nominate a director or submit a proposal for consideration at our 2021 annual meeting of stockholders, you must submit such nomination or proposal in writing to our principal executive offices at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Secretary. Such nomination or proposal must be received by us no earlier than [·], 2021 and no later than [·], 2021 and must satisfy the requirements described in our by-laws. For additional details, please see the discussion below under "*Stockholder Proposals*."

DELINQUENT SECTION 16(A) REPORTS

Section 16(a) of the Exchange Act requires our directors, executive officers and holders of more than 10% of our common stock, referred to herein as "Reporting Persons," to file with the Securities and Exchange Commission (the "SEC"), initial reports of ownership and reports of changes in ownership of our common stock. Such persons are required by SEC regulations to furnish us with copies of all such filings. Based on our review of the copies of such filings received by us with respect to the year ended December 31, 2019, and written representations from our directors and executive officers who served in such capacity during the year ended December 31, 2019, we believe that all Reporting Persons complied with all Section 16(a) filing requirements for the year ended December 31, 2019, with the exception of one report on Form 3 for each of Kenneth Shea and Camber Capital Management LP, each of which reports was inadvertently filed late.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Unless otherwise noted, the following table sets forth information regarding the beneficial ownership of our common stock as of March 31, 2020 by the following persons:

- Each person known by us to beneficially own more than 5% of our common stock;
- Each of our directors and nominees for director;
- Each of our named executive officers listed in the "Summary Compensation Table" included in this Proxy Statement; and
- All of our current directors and executive officers as a group.

"Beneficial ownership" is determined in accordance with the rules of the SEC and includes voting and investment power with respect to those shares. Pursuant to the rules of the SEC, the number of shares of common stock deemed outstanding includes shares issuable upon settlement of restricted stock units ("RSUs") and performance-based RSUs ("PSUs") held by the respective person or group that will vest or which may be settled within 60 days of March 31, 2020 and pursuant to options held by the respective person or group that are currently exercisable or may be exercised within 60 days of March 31, 2020. These stock options, RSUs and PSUs shall be deemed to be outstanding for the purpose of computing the percentage of shares beneficially owned by such person or group but shall not be deemed to be outstanding for the purpose of computing the percentage of shares beneficially owned by any other person or group.

Name and Address of Beneficial Owner	Shares Beneficially Owned	Percentage of Shares Beneficially Owned(1)
BlackRock, Inc.(2) 55 East 52nd Street New York, New York 10055	5,571,440	16.26%
Camber Capital Management LLC(3) 101 Huntington Avenue Boston, Massachusetts 02199	4,390,000	12.81%
Armistice Capital, LLC(4) 510 Madison Avenue New York, New York 10022	4,300,000	12.55%
Caligan Partners LP(5) 590 Madison Avenue New York, New York 10022	3,515,036	10.25%
Palo Alto Investors, LLC(6) 470 University Avenue Palo Alto, California 94301	3,045,065	8.89%
The Vanguard Group(7) 100 Vanguard Boulevard Malvern, Pennsylvania 19355	2,827,229	8.25%
State Street Corporation(8) State Street Financial Center One Lincoln Street Boston, Massachusetts 02111	2,714,099	7.92%
The Goldman Sachs Group, Inc.(9) 200 West Street New York, NY 10282	2,054,131	5.99%
Renaissance Technologies Holdings Corporation(10) 800 Third Avenue New York, NY 10022	2,030,200	5.92%

Name and Address of Beneficial Owner	Shares	Percentage
	Beneficially Owned	of Shares Beneficially Owned(1)
William K. Heiden(11)	854,792	2.45%
David Johnson(12)	3,515,036	10.25%
Davey S. Scoon(13)	105,170	*
Gino Santini(14)	104,695	*
Robert J. Perez(15)	105,170	*
Barbara Deptula(16)	90,345	*
John A. Fallon, M.D.(17)	86,968	*
James R. Sulat(18)	86,279	*
Paul Fonteyne(19)	15,608	*
Kathrine O'Brien(20)	30,455	*
Anne M. Phillips, M.D., FRCPC(21)	30,455	*
Edward Myles(22)	98,386	*
Anthony Casciano(23)	59,969	*
Joseph Vittiglio(24)	111,971	*
Julie Krop, M.D.(25)	119,792	*
All current directors and executive officers as a group (15 persons)(26)	5,431,305	14.89%

* Less than 1%.

- (1) Unless otherwise indicated, to our knowledge, each stockholder referred to above has sole voting and dispositive power with respect to the shares indicated, and the address of each stockholder is: c/o AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451. Applicable percentage ownership is based upon 34,266,256 shares of common stock outstanding as of March 31, 2020.
- (2) BlackRock, Inc. has sole voting power with respect to 5,454,657 of such shares, sole dispositive power with respect to all of such shares and shared voting and dispositive power with respect to none of such shares. We have relied solely on information supplied by the reporting person on a Schedule 13G/A filed with the SEC on February 4, 2020.
- (3) Reflects shares beneficially owned by Camber Capital Management LLC and Stephen DuBois. Each of the foregoing has shared voting and dispositive power with respect to all of such shares. We have relied solely on information supplied by the reporting persons on a Schedule 13G filed with the SEC on October 15, 2019.
- (4) Each of Armistice Capital, LLC and Steven Boyd has shared voting and dispositive power with respect to all of such shares and sole voting and dispositive power with respect to none of such shares. Armistice Capital Master Fund Ltd. has sole voting power and sole dispositive power with respect to none of such shares and has shared voting and dispositive power with respect to 4,060,000 of such shares. We have relied solely on information supplied by the reporting persons on a Schedule 13G/A filed with the SEC on February 14, 2020.
- (5) Caligan Partners LP has shared voting and dispositive power with respect to 3,499,428 of such shares and sole voting and dispositive power with respect to none of such shares. Includes amounts reported by Mr. Johnson in footnote (12) below. We have relied solely on information supplied by the reporting person on a Schedule 13D/A filed with the SEC on October 10, 2019, except with respect to the amounts reported by Mr. Johnson in footnote (12).
- (6) Reflects shares beneficially owned by Palo Alto Investors LP ("PAI"), PAI LLC ("PAI GP"), Patrick Lee, M.D., Anthony Joonkyoo Yun, M.D, and Palo Alto Healthcare Master Fund II, L.P. ("Healthcare Master II). Healthcare Master II, with an address of Cayman Corporate Centre, 27 Hospital Road, George Town, Grand Cayman, Cayman Islands, is the beneficial owner of and has shared voting and dispositive power with respect to 1,863,117 of such shares and sole voting power and sole dispositive power with respect to none of such shares. PAI is an investment adviser investment limited partnerships and other investment funds. PAI GP is the general partner of investment limited partnerships and has shared voting and dispositive power with respect to 3,044,374 of such shares. Dr. Lee and Dr. Yun co-manage PAI and each has shared voting and dispositive power, along with PAI with respect to 3,044,374 of such shares. Dr. Lee has sole voting

and dispositive power with respect to 691 of such shares. We have relied solely on information supplied by the reporting persons on a Schedule 13G/A filed with the SEC on February 14, 2020.

- (7) The Vanguard Group has sole voting power with respect to 31,811 of such shares, sole dispositive power with respect to 2,796,985 of such shares, shared voting power with respect to 2,233 of such shares and shared dispositive power with respect to 30,244 of such shares. We have relied solely on information supplied by the reporting persons on a Schedule 13G/A filed with the SEC on February 12, 2020.
- (8) State Street Corporation has sole voting power and sole dispositive power with respect to none of such shares and has shared voting power with respect to 2,574,733 of such shares and shared dispositive power with respect to all of such shares. SSGA Funds Management, Inc., a subsidiary of State Street Corporation, has sole voting and dispositive power with respect to none of such shares and has shared voting power with respect to 1,987,737 of such shares and shared dispositive power with respect to 1,998,186 of such shares. We have relied solely on information supplied by the reporting persons on a Schedule 13G filed with the SEC on February 13, 2020.
- (9) The Goldman Sachs Group, Inc. has sole voting power and sole dispositive power with respect to none of such shares and has shared voting power and shared dispositive power with respect to all of such shares. Goldman Sachs & Co. LLC, a subsidiary of The Goldman Sachs Group, Inc., has sole voting and dispositive power with respect to none of such shares and has shared voting power and shared dispositive power with respect to all of such shares. We have relied solely on information supplied by the reporting persons on a Schedule 13G filed with the SEC on January 31, 2020.
- (10) Renaissance Technologies Holdings Corporation has sole voting power and sole dispositive power with respect to all of such shares and has shared voting power and shared dispositive power with respect to none of such shares. Renaissance Technologies LLC, a majority owned subsidiary of Renaissance Technologies Holdings Corporation, has sole voting and dispositive power with respect to all of such shares and has shared voting power and shared dispositive power with respect to none of such shares. We have relied solely on information supplied by the reporting persons on a Schedule 13G filed with the SEC on February 12, 2020.
- (11) Includes 659,787 shares issuable to Mr. Heiden pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020.
- (12) Includes 11,201 shares issuable to Mr. Johnson pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 4,407 shares issuable to Mr. Johnson pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020. Includes amounts reported by Caligan Partners in footnote (5) above.
- (13) Includes 71,541 shares issuable to Mr. Scoon pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,116 shares issuable to Mr. Scoon pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (14) Includes 73,491 shares issuable to Mr. Santini pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,116 shares issuable to Mr. Santini pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (15) Includes 71,541 shares issuable to Mr. Perez pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,116 shares issuable to Mr. Perez pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020, 2,500 shares held by the Christine E. Perez 2004 Revocable Trust, dated February 25, 2004, as amended (the "Perez Trust") and 1,900 shares held by the Robert J. Perez 2004 Revocable Trust, dated February 25, 2004, as amended (the "Robert Perez Trust"). Mr. Perez's wife is the trustee of the Perez Trust. Mr. Perez does not have voting or dispositive power with respect to the shares held by the Perez Trust but would have sole voting and dispositive power were he to become trustee at his wife's death or incapacity. Mr. Perez is the trustee of the Robert Perez Trust and has sole voting and dispositive power with respect to the shares held by the Robert Perez Trust.

- (16) Includes 63,991 shares issuable to Ms. Deptula pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,116 shares issuable to Ms. Deptula pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (17) Includes 59,875 shares issuable to Dr. Fallon pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,116 shares issuable to Dr. Fallon pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (18) Includes 61,458 shares issuable to Mr. Sulat pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,116 shares issuable to Mr. Sulat pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (19) Includes 11,201 shares issuable to Mr. Fonteyne pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 4,407 shares issuable to Mr. Fonteyne pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (20) Includes 21,775 shares issuable to Ms. O'Brien pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,680 shares issuable to Ms. O'Brien pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (21) Includes 21,775 shares issuable to Dr. Phillips pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 8,680 shares issuable to Dr. Phillips pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (22) Includes 71,062 shares issuable to Mr. Myles pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020.
- (23) Includes 44,798 shares issuable to Mr. Casciano pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 4,999 shares issuable to Mr. Casciano pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.
- (24) Includes 84,062 shares issuable to Mr. Vittiglio pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020.
- (25) Includes 84,750 shares issuable to Dr. Krop pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020.
- (26) Includes 1,336,258 shares issuable to all of our current directors and executive officers as a group pursuant to options currently exercisable or exercisable within 60 days of March 31, 2020 and 80,136 shares issuable to all of our current directors and executive officers as a group pursuant to RSUs expected to vest or which may be settled within 60 days of March 31, 2020.

PROPOSAL 1: ELECTION OF DIRECTORS

You are being asked to vote for nine directors at this Annual Meeting, each of whom is currently a member of our Board. If you are voting by proxy, the persons named as proxies in the enclosed proxy card will vote "For" each of the nine nominees named below, unless you instruct otherwise.

Each director elected will hold office until the next annual meeting of stockholders and until his or her successor is elected and qualified, or until his or her earlier resignation or removal. Each of the nominees has indicated his or her willingness to serve, if elected. The Board knows of no reason why any of the nominees would be unable or unwilling to serve, but if any nominee should for any reason be unable or unwilling to serve, the proxies will be voted for the election of such other person for the office of director as the Board may recommend in the place of such nominee.

The brief biographies below include certain information, as of the date of this Proxy Statement, regarding the specific and particular experience, qualifications, attributes or skills of each nominee that led the Board to conclude that such nominee should continue to serve on the Board. Companies with a class of securities registered pursuant to Section 12 of the Exchange Act or subject to the requirements of Section 15(d) of the Exchange Act are referred to in the biographies below as "public" companies. Two of our current directors, Robert J. Perez and Barbara Deptula, will not be nominees for election at the Annual Meeting. Additionally, in January 2020, AMAG announced that Mr. Heiden plans to step down as AMAG's President and Chief Executive Officer; and the Board has initiated a search for his successor, which it expects to complete by mid-2020. Mr. Heiden will remain in his role as President and CEO until a successor is appointed. At the time his successor is appointed, Mr. Heiden is also expected to resign from our Board, and his successor will be appointed to our Board, as is customary.

William K. Heiden, age 60, has been a director since May 2012. Mr. Heiden has been Chief Executive Officer of AMAG since May 2012 and served as President from May 2012 through April 2015 and from April 2017 to the present. Prior to joining AMAG, he was the President and Chief Executive Officer of GTC Biotherapeutics, Inc., now rEVO Biologics, Inc., a pharmaceutical company ("GTC"), from 2010 to 2012. Mr. Heiden was President and Chief Executive Officer and a member of the Board of Directors of Elixir Pharmaceuticals, Inc. ("Elixir") from 2004 to 2008. Prior to joining Elixir, he served as President and Chief Operating Officer of Praecis Pharmaceuticals, Inc., which was subsequently acquired by GlaxoSmithKline plc, from 2002 to 2004. From 1987 to 2002, Mr. Heiden held various positions of increasing responsibility at Schering-Plough Corporation, now Merck & Co., including managing a number of businesses in the United States, Europe and Canada. Mr. Heiden has been a member of the Board of Directors of Atara Biotherapeutics, Inc. a public biopharmaceutical company, since November 2015. From 2006 to 2013, he served on the Board of Directors of LFB Biotechnologies S.A.S., a private French biotechnology company, and from 2007 to 2013, Mr. Heiden served as Chairman of the Board of Directors of GTC. Mr. Heiden holds a B.A. from the University of Florida, an M.B.A. from Cornell University's Johnson Graduate School of Management, and a M.I.M. from the University of Louvain. The Board believes that Mr. Heiden's 30 plus years of pharmaceutical industry experience leading organizations in both large pharmaceutical and emerging biotechnology companies, significant commercial expertise, and strong deal making experience provides the Board with valuable and specialized expertise as we commercialize and pursue expansion opportunities for our current products, and as we pursue additional business development opportunities and grow our organization.

John A. Fallon, M.D., age 72, has been a director since September 2014. From 2004 until January 2016, Dr. Fallon served as Senior Vice President and Chief Physician Executive at Blue Cross & Blue Shield of Massachusetts ("BCBS"). Prior to his role at BCBS, Dr. Fallon served as Chief Executive Officer for clinical affairs at the State University of New York Downstate Medical Center, including University Hospital of Brooklyn and the clinical faculty practice plan. His professional experience also includes the Partners Healthcare System, where he was chairman of the physician network. Dr. Fallon

was also the founder and Chief Executive Officer of North Shore Health System, a large physician-hospital organization in Massachusetts. He has served on the Board of Directors of Insulet Corporation, a public medical devices company, since 2012 and as the lead independent director from February 2015 to August 2016, and formerly served as the Chair of the Nominating, Governance and Risk Committee. Dr. Fallon has also served on the Board of Directors of Collegium Pharmaceutical Inc., a public pharmaceutical company, since June 2016 where he is also a member of the Audit Committee and the Chair of the Nominating and Governance Committee. Dr. Fallon also serves on the Board of Directors of NEHI (Network for Excellence in Health Innovation), a non-profit organization. In addition, he was a member of the Board of Directors of Exact Sciences Corporation, a public molecular diagnostics company, from January 2016 to July 2019, where he was also a member of the Audit Committee and Nominating and Governance Committee. Dr. Fallon practiced internal medicine for more than 20 years, fulfilled his residency at Boston City Hospital, is Board Certified in Internal Medicine and is a fellow of the American College of Physicians. He received a B.A. in chemistry from the College of the Holy Cross, an M.B.A from the University of South Florida and a medical degree from Tufts University School of Medicine. The Board believes that Dr. Fallon's qualifications to sit on our Board include his strong executive experience and extensive expertise in running a managed healthcare organization, including with pharmaceutical reimbursement and pricing issues, his experience as an executive of a leading healthcare insurance company and his experience as a clinician and administrator in academia and community-based health systems.

Paul Fonteyne, 58, most recently served as the Chairman of BI USA, a biotechnology company, and President of Animal Health for Boehringer-Ingelheim USA Corporation, one of the world's largest pharmaceutical companies. Prior to that role, Mr. Fonteyne served as the United States Country Managing Director and President and Chief Executive Officer of Boehringer Ingelheim from 2011 through 2018. Previously, Mr. Fonteyne served as Senior Corporate Vice President in Boehringer Ingelheim GmbH from 2009 to 2011. From 2003 to 2008 Mr. Fonteyne served as Executive Vice President, Head of Marketing and Sales for Prescription Medicines at Boehringer-Ingelheim Pharmaceuticals, Inc. Prior to his time with Boehringer-Ingelheim, Mr. Fonteyne held commercial leadership roles at Merck and Co. Inc. and Abbott Laboratories. Mr. Fonteyne has served on the board of ResTORbio, Inc. (NASDAQ: TORC), a biopharmaceutical company, since 2017, and has been a member of the board of Ypsomed AG (SWX: YPSN), a medical technology company, since 2018. He also was recently (April 2020) elected to serve on the board of Apellis Pharmaceuticals, Inc. (NASDAQ: APLS), a biopharmaceutical company. He is currently a director of the private companies Gelesis, Inc., a biotechnology company, and DalCor, Inc., a pharmaceutical company. Mr. Fonteyne currently serves on the advisory board of the Brigham and Women's Hospital Lung Center and has previously served on the board of PhRMA (the leading pharmaceutical industry association). He also serves as Chair of the American Cancer Society Initiative for New England (CEOs against Cancer) and as a Special Advisor to Canaan Partners, a Venture Capital Fund dedicated to Health Care and Technology early stage venture investing. Mr. Fonteyne holds an MS in Chemical Engineering from the University of Brussels and an MBA from Carnegie Mellon University. Mr. Fonteyne joined the Board in connection with our entry into a settlement agreement with, *inter alia*, Caligan Partners LP ("Caligan"), Mr. Johnson and Mr. Fonteyne (the "Settlement Agreement"). The Board believes that Mr. Fonteyne's qualifications to sit on our Board include his executive and leadership experience in a variety of capacities, including his oversight of marketing and commercial functions in his various roles.

David Johnson, 37, is a Partner and co-Founder of Caligan, an investment manager. Previously, Mr. Johnson was a Managing Director at The Carlyle Group, where he was employed from 2010 to 2017. At Carlyle, Mr. Johnson was involved in many of the firm's strategic initiatives and sat on investment committees for a number of different funds that invested in both equity and credit. Prior to joining Carlyle, Mr. Johnson worked for six years at Morgan Stanley, where he was a Vice President in the Principal Investments area. In this role, Mr. Johnson served as a director of SeaChange Maritime Limited, and as an observer of numerous company boards. Prior to joining Morgan Stanley,

Mr. Johnson worked at Weiss Asset Management in Boston, MA, during which time he served on the board of the Kazakhstan Investment Fund. Mr. Johnson has served on the Executive Committee for the Harvard College Fund, is a member of the board of directors of the Children's Scholarship Fund, and is Chair of the Finance & Investment Committee for the Riley's Way Foundation. Mr. Johnson received his A.B. in Applied Mathematics, cum laude, from Harvard College in 2004 and a S.M. in Applied Mathematics from Harvard College in 2004. Mr. Johnson joined the Board in connection with our entry into the Settlement Agreement. The Board believes that Mr. Johnson's qualifications to sit on our Board include his extensive experience as an investor and his insights into financial strategy, and organizational and business development.

Kathrine O'Brien, age 57, has been a director since April 2019. Ms. O'Brien served from 1984 to September 2018 in roles of increasing responsibility at Unilever PLC., a public consumer goods company. Most recently at Unilever, she served as Vice President/General Manager, Skin & Marketing Services and was a member of the North America Leadership Team. She has been a member of the Board of Directors of Tabula Rasa HealthCare, Inc., a public healthcare technology company, since November 2018 and has been a member of the Board of Trustees of Lehigh Valley Health Network, a medical group, since June 2017. Ms. O'Brien holds a B.A. in economics from Boston College and an M.B.A. from Columbia University. The Board believes that Ms. O'Brien's qualifications to sit on our Board include her decades of experience and recognition in the marketing field, including digital and social media, with a focus on women's personal care products, in light of our commercial programs, which focus, in part, in the women's health area and utilize direct-to-consumer marketing strategies.

Anne M. Phillips, M.D., FRCPC, age 66, has been a director since April 2019. Dr. Phillips currently holds the position of Senior Vice President, Clinical Development, Medical and Regulatory Affairs at Novo Nordisk, Inc., a pharmaceutical company, where she has served since 2011. Prior to Novo Nordisk, Dr. Phillips served in various roles of increasing responsibility from 1998 to 2010 at GlaxoSmithKline plc, a global healthcare company. Dr. Phillips also served as the Head of the Infectious Diseases Program and Deputy Physician-in-Chief at Wellesley Central Hospital/St. Michael's Hospital in Toronto, Canada. She has been a member of the Board of Directors of Trevena, Inc., a public biopharmaceutical company, since December 2014, where she is also a member on the Nominating and Corporate Governance Committee and Compensation Committee. Dr. Phillips is a Fellow of The Royal College of Physicians and Surgeons of Canada, earned an M.D. from the University of Toronto and received a BSc from the University of Western Ontario. The Board believes that Dr. Phillips' broad-based expertise in the pharmaceutical industry leading clinical research and development, medical, and regulatory functions, as well as her medical training, allows her to make valuable contributions to the medical and scientific understanding of the Board, which is particularly important given our expansive development pipeline, including our AMAG-423 and ciraparantag products.

Gino Santini, age 63, has been a director since February 2012 and has served as Chairman of the Board of Directors since April 2014. From 1983 to 2010, Mr. Santini held a variety of commercial and operational roles at Eli Lilly and Company ("Eli Lilly"), a public pharmaceutical company, serving most recently from 2007 to 2010 as Senior Vice President, Corporate Strategy and Business Development, where he led corporate strategy and long-range planning, mergers and acquisitions, new product licensing and the expansion of Lilly Ventures in the U.S. and China. During his tenure at Eli Lilly, Mr. Santini held various leadership positions of increasing responsibility, including manager of various international regions, Senior Vice President of Corporate Strategy and Policy from 2004 to 2007, President of U.S. operations from 1999 to 2004 and President of the women's health franchise from 1997 to 1999. Mr. Santini has served on the Board of Directors of Collegium Pharmaceuticals, Inc., a public pharmaceutical company, since 2012, where he is the chair of the Compliance Committee and a member of the Compensation Committee. Since December 2015, Mr. Santini has served on the Board of Directors of Intercept Pharmaceuticals, Inc. a public biopharmaceutical company, where he is also

the chair of the Compensation Committee and a member of the Audit Committee. Mr. Santini also serves on the Board of Directors, as well as the Chair of the Transactions Committee and a member of the Compensation Committee of the Board of Directors, of Horizon Pharma, Plc., a public biopharmaceutical company, where he has been a director since 2012. Mr. Santini has served on the Board of Directors of Intarcia Therapeutics, Inc., a private biopharmaceutical company, since 2013 and the Board of Directors of Artax Biopharma Inc., a private biopharmaceutical company, since April 2014. Mr. Santini has also been a member of the Board of Directors of Allena Pharmaceuticals, Inc., a public specialty pharmaceutical company, since February 2012, and notified Allena in March 2020 that he does not intend to stand for reelection at its 2020 annual meeting of stockholders. Mr. Santini was a member of the Board of Directors of Vitae Pharmaceuticals, Inc., a public pharmaceutical company, from September 2014 to November 2016 when it was acquired by Allergan plc in October 2016. He holds an undergraduate degree in mechanical engineering from the University of Bologna and an M.B.A. from the Simon School of Business, University of Rochester. The Board believes that Mr. Santini's long career at Eli Lilly and extensive domestic and international commercial, corporate strategy, business development and transaction experience are valuable skill sets for the Board as it seeks to continue to drive growth and seeks to acquire or in-license other assets or companies to further expand our product portfolio, such as our recent acquisition of AMAG-423 and ciraparantag. Mr. Santini's more recent experience on a variety of small to mid-size pharmaceutical companies' boards is also helpful to his work on the Board.

Davey S. Scoon, age 73, has been a director since December 2006. Mr. Scoon served as Chief Administrative and Financial Officer of Tom's of Maine, a company that manufactures natural care products, from 2003 to 2005. From 2001 to 2003, Mr. Scoon served as Chief Financial and Administrative Officer for Sun Life Financial U.S., and from 1999 to 2001, Mr. Scoon served as Vice President and Chief Financial Officer for Sun Life Financial U.S. From 1985 to 1999, Mr. Scoon was employed by Liberty Funds Group of Boston (formerly Colonial Management) in various capacities, including Chief Financial Officer and Chief Operating Officer. Since 2012, Mr. Scoon has been a member of the Board of Directors and the Chairman of the Audit Committee of Albireo Pharma, Inc. (formerly known as Bidel Inc.), a public biopharmaceutical company. Mr. Scoon has been a director of Allianz Funds, an investment company registered under the Investment Company Act of 1940, since 2006, where he also served as Chairman of the Board of Trustees until January 2019. Mr. Scoon was also a member of the Board of Directors and the Audit Committee of Orthofix International, N.V., a medical device company, from 2011 to June 2015. Mr. Scoon was an Adjunct Professor at the University of Wisconsin-Madison from 2011 to 2018. Mr. Scoon holds a B.B.A. from the University of Wisconsin and an M.B.A. from Harvard Business School and is a Certified Public Accountant. The Board believes that Mr. Scoon's extensive financial, accounting and operational experience gained through the various executive and board positions he has held over the past 30 years provides the Board with valuable and highly specialized expertise and advice, particularly in Mr. Scoon's role as the Chair of the Audit Committee.

James R. Sulat, age 69, has been a director since April 2014. From 2009 to 2013, Mr. Sulat served as Chief Executive Officer and Chief Financial Officer of Maxygen, Inc. ("Maxygen"), a public biopharmaceutical company, and was a member of Maxygen's Board of Directors from 2003 to 2013. From 2005 until 2008, Mr. Sulat served in several roles for Memory Pharmaceuticals Corp. ("Memory"), including as President and Chief Executive Officer from 2005 to 2008, as Chief Financial Officer during 2008, and as a member of Memory's Board of Directors from 2005 to 2009. Mr. Sulat has served on the Board of Directors of Arch Therapeutics, Inc., a public medical device company, since August 2015. Mr. Sulat served as the Chairman of the Board of Directors for Momenta Pharmaceuticals, Inc., a public biotechnology company, and as a member of its Audit Committee and its Nomination and Corporate Governance Committee from 2008 to July 2019. Since 2005, Mr. Sulat has served on the Supervisory Board of Intercell AG and, its successor company, Valneva SE, both public European biotechnology companies, and currently serves as Chairman of its Audit Committee.

Mr. Sulat served on the Board of Directors of Diadexus, Inc., a public diagnostics company, from January 2015 to June 2016 as well as Chairman of its Audit Committee and a member of its Nominating and Corporate Governance Committee. Mr. Sulat also served as a member of the Board of Directors for Tolero Pharmaceuticals, Inc., a private biopharmaceutical company, from April 2015 to January 2017, when it was acquired by Sumitomo Dainippon Pharma Co., Ltd. Mr. Sulat received his B.S. in Administrative Sciences from Yale University. He received his M.B.A. and his M.S. in Health Services Administration from Stanford University. The Board believes that Mr. Sulat's qualifications to sit on our Board include his strong executive experience and extensive financial accounting, corporate finance, operations and business development expertise garnered through his executive roles and his board-level experience at various public and private companies.

Required Vote

Each nominee must receive more votes cast "For" such nominee's election than the votes cast "Against" such nominee's election (*i.e.*, a majority of the votes cast). Our Corporate Governance Guidelines provide that if an incumbent director is not elected by at least a majority of votes cast, the Governance and Risk Committee shall promptly consider his or her resignation, and make a recommendation to the Board as to whether to accept or reject the resignation, or whether other action should be taken. The Board will act on the Governance and Risk Committee's recommendation within 30 days following certification of the stockholder vote, as further described below under "*Information Regarding The Board Of Directors And Corporate Governance—Director Resignation Policy*".

**OUR BOARD UNANIMOUSLY RECOMMENDS
A VOTE "FOR" EACH OF THE NOMINEES LISTED ABOVE.**

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

INDEPENDENCE OF THE BOARD OF DIRECTORS

The Board has determined that, other than Mr. Heiden, each nominee is "independent," including for purposes of the rules of Nasdaq and the SEC. The Board has affirmatively determined that no independent director has any material relationship with us that would interfere with the exercise of his or her independent judgment. In making such independence determination, our Board considered the relationships that each director has with us and all other facts and circumstances that are deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director and the association of our directors with the holders of 5% or more of our common stock. With respect to Mr. Johnson, our Board considered, among other things, the terms of the Settlement Agreement (as described below under the heading "*Settlement Agreement with Caligan Partners*") and the fact that Mr. Johnson is a Partner and co-Founder of Caligan, which owns more than 10% of our common stock, and determined that Mr. Johnson is independent, including for purposes of the rules of Nasdaq and the SEC, and believes that his relationship with Caligan will not impair Mr. Johnson's exercise of independent judgment.

BOARD LEADERSHIP STRUCTURE

Our Board is led by an independent Chair, currently Mr. Santini, who has authority, among other things, to call and preside over Board meetings, including meetings of the independent directors, to set meeting agendas, and to determine the materials distributed to the Board. Our Chief Executive Officer, Mr. Heiden, is the only member of our Board who is not an independent director. Our Corporate Governance Guidelines provide our Board with flexibility to determine the appropriate leadership structure based on the specific needs of the business and the best interests of our stockholders. Although we do not have a formal policy regarding whether the offices of Chair of the Board and Chief Executive Officer should be separate, our Board believes that the existing leadership structure, with the separation of the Chair of the Board and Chief Executive Officer roles, is appropriate at the current time. The Board believes that the current structure enhances the accountability of the Chief Executive Officer to the Board and strengthens the Board's independence from management, including helping to ensure that any potential strategic transactions involving AMAG are evaluated independently of management's interest and in light of the best interests of our stockholders. Separating these roles also alleviates the administrative burden on our Chief Executive Officer and allows Mr. Heiden, and is expected to allow his successor, to focus his or her efforts on managing our business in the best interests of our stockholders. The Board recognizes that, depending on the circumstances, other leadership models, such as combining the role of Chair and Chief Executive Officer, might be appropriate and, accordingly, the Board periodically reviews its leadership structure.

CONSIDERATIONS GOVERNING DIRECTOR NOMINATIONS

The Board has delegated to the Governance and Risk Committee the responsibility for assisting the Board in determining the desired experience, mix of skills and other criteria and qualities appropriate for Board membership. To guide this assessment, our Corporate Governance Guidelines set forth certain general criteria for nomination as a director and provide that in identifying prospective director candidates, the Governance and Risk Committee may consider all facts and circumstances that it deems appropriate or advisable, including, among other things, the skills of the prospective director candidate, his or her depth and breadth of business experience or other background characteristics, his or her independence and the needs of the Board.

As outlined in our Corporate Governance Guidelines, the Governance and Risk Committee considers backgrounds and qualifications of a nominee in the context of the backgrounds and

qualifications of the current directors as a group, which should provide a significant breadth of experience, knowledge and abilities that shall assist the Board in fulfilling its responsibilities.

As part of its evaluation, the Governance and Risk Committee conducts periodic assessments of key competencies needed to be an effective and contributing member of the Board, which aids the Governance and Risk Committee in determining which specific skills or attributes in potential new directors would benefit the Board as a whole. Also, the Board has the authority to consider and approve from time to time the criteria that it deems necessary or advisable for prospective director candidates. The Board has determined that such criteria, at a minimum, includes the following:

- Nominees should have experience at a strategic or policymaking level;
- Nominees should be highly accomplished in his or her respective field, with superior credentials and recognition and demonstrated ability to exercise sound judgment in matters that relate to our current and long-term objectives;
- Nominees should have a long-term reputation for integrity, honesty and adherence to high ethical and moral standards;
- Nominees should have the commitment and ability to understand our business and industry, as well as the sometimes conflicting interests of our various constituencies, which include stockholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all stockholders;
- Nominees should have sufficient time and availability to devote to the Company's affairs, particularly in light of the number of boards of directors on which such nominee may serve and should be willing and able to contribute positively to the decision-making process of the Company; and
- Nominees should not have, nor appear to have, a conflict of interest that would impair such nominee's ability to represent the interests of all our stockholders and to fulfill the responsibilities of a director.

Further, nominees shall not be discriminated against on the basis of race, religion, national origin, sex, sexual orientation, disability or any other basis proscribed by law. The Board believes that a diverse membership with varying perspectives and breadth of experience is an important attribute of a well-functioning board and will enhance the quality of the Board's deliberations and decisions. As a result, the Governance and Risk Committee also considers diversity of background, experience, gender, race, ethnicity and skills among Board members. For example, in 2018, our Board retained Russell Reynolds Associates to conduct a search to identify candidates to serve on the Board, resulting in the appointment of Kathrine O'Brien and Anne Phillips to the Board in April 2019. Moreover, among our employee population, women hold approximately 45% of our leadership positions in the Company, with titles of Director or higher. The Governance and Risk Committee evaluates diversity in terms of race, religion, national origin, gender, sexual orientation, and disability, as well as differences of viewpoint, professional experience, education, skill, and other individual qualities and attributes that contribute to heterogeneity on the Board.

As provided in our Corporate Governance Guidelines, the Board believes that the nomination of existing directors should not be viewed as automatic, but should be based on continuing qualification under the criteria set forth above or otherwise determined by the Board and the overall needs of the Board. The Governance and Risk Committee considers the existing directors' performance on our Board and its committees in making its nomination recommendations. In seeking new candidates for directors, members of our Governance and Risk Committee may use their business, professional and personal contacts, accept recommendations from other Board members or management, or engage a professional search firm.

The Governance and Risk Committee will also consider director nominee candidates who are recommended by our stockholders. Our Corporate Governance Guidelines provide the procedures stockholders should follow in making such a recommendation, which generally provide that all stockholder recommendations for director candidates must be submitted to us not less than 120 calendar days prior to the date on which our proxy statement was released to stockholders in connection with the previous year's annual meeting. All stockholder recommendations for director candidates must include the following information:

- The name and address of record of the stockholder;
- A representation that the stockholder is a record holder of the Company's securities, or if the stockholder is not a record holder, evidence of ownership in accordance with Rule 14a-8(b)(2) of the Exchange Act;
- The name, age, business and residential address, educational background, current principal occupation or employment, and principal occupation or employment for the preceding five full fiscal years of the proposed director candidate;
- A description of the qualifications and background of the proposed director candidate which addresses the criteria for Board membership approved by the Board and set forth in the Corporate Governance Guidelines and/or the charter of the Governance and Risk Committee;
- A description of all arrangements or understandings between the stockholder and the proposed director candidate;
- The consent of the proposed director candidate (a) to be named in the proxy statement relating to our annual meeting of stockholders and (b) to serve as a director if elected at such annual meeting;
- A statement that the proposed director candidate will tender an irrevocable resignation, effective upon such person's failure to receive the required vote for election at the next meeting at which such person would face election (or re-election) and upon acceptance of such resignation; and
- Any other information regarding the proposed director candidate that is required to be included in a proxy statement filed pursuant to the rules of the SEC.

In considering stockholder recommendations for nominees, the Governance and Risk Committee may request additional information concerning the nominee or the applicable stockholder or stockholders. Stockholder recommendations will be considered using the same criteria as other candidates. The foregoing applies only to recommendations. Actual nominations by stockholders or others, if and to the extent permitted, must be made in accordance with our by-laws and applicable state and federal laws. See the discussion below under "*Stockholder Proposals*."

In 2019, as part of its ongoing Board refreshment and commitment to good corporate governance, the Governance and Risk Committee considered the composition and performance of our existing Board, and considered various potential director candidates, including those nominees to our Board named by Caligan in connection with its consent solicitation. As a result of such review, as discussed above, we appointed Kathrine O'Brien and Anne Phillips to our Board in April 2019 and, in conjunction with our entry into the Settlement Agreement, we appointed Mr. Johnson and Mr. Fonteyne to our Board in October 2019.

The nominations for the election of directors at the Annual Meeting contained in this Proxy Statement are based upon the unanimous recommendation of the Governance and Risk Committee to the full Board in March 2020.

DIRECTOR RESIGNATION POLICY

Under Delaware law, an incumbent director may remain in office notwithstanding the failure to receive the required vote for re-election until the director's successor is duly elected. To address this "holdover rule," our Corporate Governance Guidelines include a director resignation policy, whereby our Board will nominate for re-election or fill vacancies with only those directors who tender an irrevocable, contingent resignation in writing that will become effective upon (a) the failure to receive the required vote at the next stockholders' meeting at which they face election and (b) the Board's acceptance of such resignation. If a director fails to receive the required vote for re-election, the Governance and Risk Committee will promptly consider the director's resignation and the circumstances that led to such director's failure to receive the required vote for re-election (if known), and recommend to the full Board whether to accept or reject such director's resignation. Our Board expects the director whose resignation is under consideration to abstain from participating in any decision regarding such director's resignation. In considering whether to accept or reject a director's resignation, the Governance and Risk Committee and Board may consider any factors it deems relevant. Within 30 days after the date of the certification of the election results for the applicable stockholders' meeting, our Board will act on the resignation, taking into account the Governance and Risk Committee's recommendation, and publicly disclose its decision in a Current Report on Form 8-K.

THE BOARD'S ROLE IN RISK OVERSIGHT

The Board acknowledges that the successful development and commercialization of products is an enterprise of inherent risk, including significant risk in each of the drug development, regulatory approval, launch, commercialization and life cycle management stages. Accordingly, the Board believes that the identification, prioritization and management of risks are an integral part of establishing, updating and executing on our business strategy. The Board, both as a whole and at the committee level, has oversight responsibility relating to risks that could affect the corporate strategy, business objectives, compliance, operations, financial condition, and performance of the Company. Although the Board maintains ultimate responsibility for such enterprise risk assessment, the Board has delegated to the Governance and Risk Committee the responsibility of providing oversight with respect to our risk management process. Such oversight responsibilities include a review of the steps management has taken to monitor, control and report such exposures, periodic reviews of our policies with respect to risk assessment and risk management, including periodic enterprise risk management assessments, and reporting on such reviews to the full Board.

Our senior executives regularly attend meetings of the Board, the Governance and Risk Committee and other committees, and provide the Board and its committees with regular reports regarding our operations, strategies, and objectives and the risks inherent within them. Board and committee meetings also provide a venue for directors to discuss issues with, request additional information from, and provide guidance to, senior management. The Board and its committees call special meetings and request information and reports from senior management when necessary to address specific issues. In addition, our directors have direct access to senior management to discuss any matters of interest, including those related to risk. Those members of management most knowledgeable of the issues regularly attend Board and committee meetings to provide additional insight into items being discussed, including risk exposures.

The Board understands that risks can arise from any decision or action taken by the Company, whether strategic or operational. The Board approves our high level goals, strategies, and policies to set the tone and direction for appropriate risk taking within the business. The Board and its committees then emphasize this tone and direction in their oversight of management's implementation of our goals, strategies, and policies. The Board has delegated general oversight of enterprise risk to the Governance and Risk Committee and, for matters involving certain specific areas of risk exposure, to other standing committees, such as the Audit Committee and Compensation Committee. Each of these committees

reports to the Board at regularly scheduled Board meetings, as needed, and more frequently if appropriate, with respect to the matters and risks for which the committee provides oversight. Each committee is also authorized and empowered to retain independent advisors, as the committee deems appropriate, in order to discharge its responsibilities under the committee's charter, and such independent advisors attend committee meetings as appropriate. The committees of the Board execute their risk oversight responsibility for risk management as follows:

- The Governance and Risk Committee is responsible for providing oversight with respect to our risk management process, including reviewing the steps management has taken to identify, monitor, control and report areas of risk, our policies with respect to risk assessment and our risk management processes, including periodic enterprise risk management assessments and information security risk assessments. In addition, the Governance and Risk Committee has historically overseen risks related to our corporate governance, including Board and director performance, director succession, director education and the review of our Corporate Governance Guidelines and other governance documents. The Governance and Risk Committee also oversees our overall compliance program, with particular emphasis on the risks associated with our healthcare compliance program and responding to unexpected events, such as COVID-19 and its impact on the markets, the Company's industry and our employees, patients, healthcare providers and business partners.
- The Audit Committee oversees the integrity of our financial statements, reporting process and internal controls, the relationship with our independent registered public accounting firm, including its qualifications, independence and performance, and our corporate finance matters, including our capital structure. The Audit Committee also provides oversight with respect to the financial aspects of our risk management process, discussing with management our significant financial risk exposures, steps management has taken to monitor, control and report such exposures, and our policies with respect to risk assessment and risk management.
- The Compensation Committee is primarily responsible for the design and oversight of our executive compensation philosophy, policies, plans and practices. A key objective of the Compensation Committee is to ensure that our overall executive compensation program appropriately links pay to performance and aligns the interests of our executives with our stockholders. The Compensation Committee also monitors the design and administration of our overall incentive compensation programs to ensure that such programs include appropriate safeguards to avoid encouraging unnecessary or excessive risk taking by our employees. Elements of our executive compensation program that mitigate excessive risk taking, such as our combination of short- and long-term incentives, are described below under "*Compensation Discussion and Analysis*."

RISK CONSIDERATIONS IN OUR COMPENSATION POLICIES AND PRACTICES

Our Compensation Committee believes that risks arising from our employee compensation policies and practices are not likely to have a material adverse effect on the Company. In addition, the Compensation Committee believes that the mix and design of the elements of the Company's executive compensation do not encourage management to take excessive risks. The considerations which led the Compensation Committee to these conclusions include the following:

- We provide executives with a competitive base salary, which we believe mitigates risk-taking behavior by providing reasonable predictability in the base level of income earned by each executive and alleviating pressure on executives to focus exclusively on near-term stock price performance or annual bonus awards to the detriment of building long-term stockholder value;
- We utilize a mixture of compensation elements intended to be competitive to compensation packages offered to similarly-situated executives at comparable companies within our industry,

with significant weighting towards long-term incentive compensation, which has retention value and which discourages short-term risk taking, and we introduce retention elements if we foresee the need to preserve management continuity;

- Our performance goals for our annual cash bonus awards reflect a balanced mix of performance measures, including objective performance measures, to avoid excessive weight on any one goal or performance measure and are intended to be challenging yet attainable, so that it is more likely than not that the executives will earn a substantial portion of their target bonus annually, which mitigates the potential that our executives will take excessive risks;
- Short-term incentives in the form of annual performance bonus payouts are capped at 200% of the target amount, which discourages our executives from taking excessive risks;
- Equity incentive awards are granted annually and generally vest over three to four years, discouraging excessive risk-taking as our executives generally have a significant amount of unvested awards that could decrease significantly in value if our business is not managed for the long-term;
- We maintain a long-term incentive plan in order to further align the goals and interests of executives and senior management to the long-term interests of the Company and our stockholders and to enable us to attract and retain highly qualified executives and employees (the "LTIP"). The LTIP includes awards of PSUs, which vest, if at all, based on the Company's total shareholder return ("TSR") performance measured against the median TSR of a defined comparator group of companies over a three-year period;
- Compliance, ethical behavior and adherence to our corporate values and policies are integral factors considered in all performance assessments and serve to mitigate the potential that our executives will take excessive risks. The Board and the Compensation Committee retain discretion to adjust compensation based on both the quality of Company and individual performance and adherence to our corporate governance and compliance programs, among other things;
- To minimize the risk of certain transactions related to our securities, we have adopted policies prohibiting directors, officers and other employees from engaging in the following transactions with respect to our securities: (a) selling short, (b) buying or selling puts or calls, (c) purchasing on margin or (d) pledging or creating any other encumbrance with respect to our securities;
- To further align the interests of our executives with our stockholders, our executive officers are subject to stock ownership guidelines;
- Our executive officers are subject to a clawback policy under which we can recover incentive compensation from certain officers in the event we are required to prepare an accounting restatement due to material noncompliance with financial statement requirements; and
- We have a robust system of internal controls and a comprehensive compliance program, which includes extensive training of all employees, which we believe promotes a culture of ethical behavior and compliance, as well as an appropriate attitude toward minimizing risk-taking.

POLICY ON PLEDGING, HEDGING AND TRADING OF COMPANY STOCK

Certain transactions in our securities (such as purchases and sales of publicly traded put and call options, short sales, hedging transactions such as prepaid variable forwards, equity swaps and collars) create a heightened compliance risk or could create the appearance of misalignment between management and stockholders. In addition, securities held in a margin account or pledged as collateral may be sold without consent if the owner fails to meet a margin call or defaults on the loan, thus creating the risk that a sale may occur at a time when an officer or director is aware of material,

non-public information or otherwise is not permitted to trade in Company securities. Therefore, we have adopted policies prohibiting directors, officers and other employees from selling short, buying or selling puts or calls, purchasing on margin and pledging or creating any other encumbrance with respect to our securities, whether or not granted to such director, officer or employee as part of the compensation of such person.

MEETINGS OF THE BOARD OF DIRECTORS

Our Board met ten times during the year ended December 31, 2019. Each director participated in at least 75% of the aggregate number of meetings of the Board and of each committee of the Board on which he or she served during the portion of the last fiscal year for which such person was a director or committee member. It is our policy that our directors are expected to attend each annual meeting of stockholders. All of our then-serving directors attended our annual meeting of stockholders held on May 16, 2019.

In addition, our independent directors meet regularly, and in any event at least twice a year, in executive session without the presence of management.

COMMITTEES OF THE BOARD OF DIRECTORS

Standing Committees

Under our by-laws, our Board may designate committees comprised of members of the Board and delegate to these committees the power and authority of the Board in the management of our business and affairs, subject to limitations imposed by law. Our Board currently has the following standing committees: an Audit Committee, a Compensation Committee, and a Governance and Risk Committee. The following table provides membership information for the current composition of these committees:

Name	Audit Committee	Compensation Committee	Governance and Risk Committee
Barbara Deptula	X	—	—
William K. Heiden	—	—	—
John A. Fallon, M.D.	—	X	X*
Paul Fonteyne	—	X	—
David Johnson	X	—	—
Kathrine O'Brien	X	—	—
Robert J. Perez	—	—	X
Anne M. Phillips, M.D., FRCPC	—	—	—
Gino Santini	—	X	—
Davey S. Scoon	X*	—	X
James R. Sulat	—	X*	—

* Committee Chair

Audit Committee

Our Board has a standing Audit Committee, which held five meetings during the year ended December 31, 2019. The Audit Committee is currently comprised of Mr. Scoon (Chair), Mr. Johnson, Ms. Deptula and Ms. O'Brien, each of whom is "independent" as such term is defined in the listing

standards of NASDAQ and applicable SEC rules. Mr. Scoon and Ms. Deptula served on the Audit Committee during the entire year ended December 31, 2019. Ms. O'Brien and Mr. Johnson joined the Audit Committee in May 2019 and October 2019, respectively. Based on Mr. Scoon's extensive financial and accounting experience gained through his various executive and board positions, including tenures as Chief Financial Officer and/or Chief Administrative Officer of several companies, our Board has determined that Mr. Scoon qualifies as an "audit committee financial expert" as defined by SEC rules. The Board has also determined that Ms. Deptula, Ms. O'Brien and Mr. Johnson each possess the requisite financial sophistication to qualify her for service on the Audit Committee in accordance with SEC rules. The current charter of the Audit Committee is available on our website at www.amagpharma.com, under the heading "Investors."

Pursuant to its charter, the Audit Committee's general responsibilities include, among other things, the following:

- Evaluating and selecting our independent registered public accounting firm;
- Reviewing our audited and unaudited financial statements;
- Reviewing and discussing the adequacy of our internal financial and accounting processes and internal control over financial reporting with management and our independent registered public accounting firm;
- Supervising the relationship between us and our independent registered public accounting firm;
- Reviewing and authorizing the scope of both audit and non-audit services and related fees;
- Evaluating the independence of our independent registered public accounting firm;
- Reviewing and approving related person transactions; and
- To the extent deemed necessary by the Audit Committee to carry out its duties, engaging and compensating independent counsel and other advisers to review any matter under its responsibility.

Compensation Committee

Our Board has a standing Compensation Committee, which held seven meetings during the year ended December 31, 2019. Currently, the Compensation Committee is comprised of Mr. Sulat (Chair), Mr. Santini, Mr. Fonteyne and Dr. Fallon, each of whom is "independent" as such term is defined in the listing standards of NASDAQ and is a "non-employee director" within the meaning of Rule 16b-3 under the Exchange Act. Dr. Fallon and Mr. Santini each served on the Compensation Committee during the entire year ended December 31, 2019. Mr. Sulat and Mr. Fonteyne joined the Compensation Committee in May 2019 and October 2019, respectively. The current charter of the Compensation Committee is available on our website at www.amagpharma.com, under the heading "Investors."

Pursuant to its charter, the Compensation Committee's general responsibilities currently include, among other things, the following:

- The review, authorization and approval of the recruitment, hiring and compensation for any of our executive officers and any other of our officers with a title of Senior Vice President or higher, including our Chief Executive Officer. The Compensation Committee may delegate any authority granted to it under this Charter to the Chair or any other member of the Compensation Committee, or to any member or members of senior management, as it deems advisable. The Compensation Committee generally delegates the ability to approve the recruitment, hiring and compensation for any of our Senior Vice Presidents or below to our Chief Executive Officer;

- The exercise of all rights, authority and functions of the Board under all of our stock option, stock incentive, employee stock purchase and other equity-based plans, including the authority to interpret their terms, to grant options, and to make stock awards (provided that, except as otherwise expressly authorized to do so by a plan or resolution of the Board, the Compensation Committee shall not be authorized to amend any such plan);
- The review and recommendation to the full Board with respect to director compensation;
- Oversight regarding our public disclosure of director and executive compensation information; and
- The engagement of compensation consultants and other advisers as it deems necessary or appropriate to carry out its responsibilities. The Compensation Committee assesses the independence and any potential conflicts of interest of compensation advisors in accordance with applicable law and NASDAQ listing standards.

Governance and Risk Committee

Our Board has established a standing Governance and Risk Committee, which is currently comprised of Dr. Fallon (Chair), Mr. Perez and Mr. Scoon, each of whom is "independent" as such term is defined in the listing standards of NASDAQ and each of whom served on the Governance and Risk Committee during the entire year ended December 31, 2019. The Governance and Risk Committee held five meetings during the year ended December 31, 2019. The current charter for the Governance and Risk Committee is available on our website at www.amagpharma.com, under the heading "Investors."

Pursuant to its charter, the Governance and Risk Committee's general responsibilities include, among other things, the following:

- Assisting the Board in determining the desired experience, mix of skills and other criteria and qualities appropriate for Board membership;
- Actively seeking individuals qualified to become members of the Board, consistent with criteria approved by the Board, and recommending director nominees for selection by the Board for nomination to fill expiring terms of directors at each annual meeting of stockholders;
- Periodically reviewing and assessing the adequacy of the Corporate Governance Guidelines and recommending any modifications to the Corporate Governance Guidelines to the Board for approval;
- Performing a self-evaluation by Board members and by members of the Governance and Risk Committee from time to time to determine whether they are functioning effectively and to improve the performance of the Board and/or Committee as a whole;
- Providing oversight and guidance to senior management concerning the assessment and management of the Company's risk and assist the Board in providing oversight of our risk management process, including conducting periodic enterprise risk management assessments;
- Providing oversight of and guidance with respect to our internal compliance program;
- To the extent required or advisable, develop, implement, review and monitor an orientation and education program for members of the Board; and
- Retaining and terminating any search firm to be used to identify director candidates, including approving the search firm's fees and other retention terms. The Governance and Risk Committee shall also have authority to obtain advice and assistance from internal or external legal, accounting or other advisors.

Other Committees of the Board

Our Board may, as needed or advisable from time to time, form temporary or *ad hoc* committees and delegate the authority to oversee, identify, evaluate or negotiate a specific issue or opportunity and to make recommendations to the full Board. For example, although there was not cause for such committees to meet during 2019, our Board has established a Transaction Committee to oversee, advise on and assist our management and the full Board in considering or pursuing strategic transactions involving AMAG, and a Financing Committee to oversee the execution and consummation of potential financing transactions involving AMAG

Additionally, in January 2020, we announced that Mr. Heiden will step down as our President and Chief Executive Officer after approximately eight years leading the Company. In connection with a search for his successor, our Board established a CEO Search Committee. The CEO Search Committee has the authority to oversee the search to identify a successor Chief Executive Officer, including the authority to retain, engage and manage any third-party search firms or similar consultants, review candidate materials and determine the appropriate interview process for the selected or potential candidates. Mr. Heiden will remain in his current position and as a member of our Board, if re-elected at the Annual Meeting, until his successor is appointed. The CEO Search Committee consists of Messrs. Fallon, Santini and Scoon.

REPORT OF THE AUDIT COMMITTEE¹

The Audit Committee has reviewed and discussed our audited financial statements for the year ended December 31, 2019 with our management. The Audit Committee has discussed with PricewaterhouseCoopers LLP, our independent registered public accounting firm, the matters required to be discussed by the applicable auditing standards Public Company Accounting Oversight Board ("PCAOB") and the SEC. The Audit Committee has met with PricewaterhouseCoopers LLP, with and without management present, to discuss the results of its examinations, its evaluation of our internal control over financial reporting, and the overall quality of our financial reporting. The Audit Committee has also received the written disclosures and the letter from PricewaterhouseCoopers LLP required by applicable requirements of the PCAOB regarding the independent accountant's communications with the Audit Committee concerning independence. The Audit Committee has discussed with PricewaterhouseCoopers LLP that firm's independence from management and AMAG and considered the compatibility of the firm's provision of non-audit services with maintaining the firm's independence and found the provision of such services to be compatible with the firm's independence.

Based on the reviews and discussions referred to above, the Audit Committee concluded that it would be reasonable to recommend, and on that basis did unanimously recommend, to the Board (and the Board has approved) that the audited financial statements be included in AMAG's Annual Report on Form 10-K for the year ended December 31, 2019 for filing with the SEC.

Respectfully submitted by the Audit Committee of the Board of Directors of AMAG Pharmaceuticals, Inc.,

Davey S. Scoon, Chair
Barbara Deptula
Kathryn O'Brien
David Johnson

¹ The material in this report is not "soliciting material," is furnished to, but not deemed "filed" with, the SEC and is not deemed to be incorporated by reference in any filing of AMAG under the Securities Act of 1933 (as amended, the "Securities Act") or the Exchange Act, other than

AMAG's Annual Report on Form 10-K, where it shall be deemed to be "furnished," whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

STOCKHOLDER COMMUNICATION WITH THE BOARD OF DIRECTORS

Our Board believes it is important for stockholders to be able to send communications to the members of our Board. Accordingly, any stockholder who desires to communicate with our directors, individually or as a group, may do so by e-mailing the party or parties to whom the communication is intended at contactus@amagpharma.com or by writing to the party or parties for whom the communication is intended at our principal executive offices at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Secretary. Upon receipt of such communications, our Secretary will direct the correspondence to the appropriate party or parties.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

No one who served as a member of our Compensation Committee during fiscal year 2019 is or has been an officer or employee of AMAG or had any relationship that is required to be disclosed as a transaction with a related party. 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 (or other committee serving an equivalent function) of any entity that has one or more of its executive officers serving on our Board or our Compensation Committee.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In accordance with its charter and AMAG's written related person transactions policy contained in our Corporate Governance Guidelines, discussed below, the Audit Committee reviews, approves and ratifies any related person transaction and monitors compliance with and periodically reviews the related person transactions policy. The term "related person transaction" refers to any transaction required to be disclosed in our filings with the SEC pursuant to Item 404 of Regulation S-K.

In considering any related person transaction, the Audit Committee considers the facts and circumstances regarding such transaction, including, among other things, the amounts involved, the relationship of the related person (including those persons identified in the instructions to Item 404(a) of Regulation S-K) with our company and the terms that would be available in a similar transaction with an unaffiliated third-party. The Audit Committee also considers its fiduciary duties, our obligations under applicable securities law, including disclosure obligations and director independence rules, and other applicable law in evaluating any related person transaction. The Audit Committee reports its determination regarding any related person transaction to our full Board.

In addition, our Board has adopted a written related person transactions policy, which provides that any related person transaction shall be consummated or shall continue only if:

- The Audit Committee approves or ratifies such transaction in accordance with our related person transactions policy and if the transaction is on terms comparable to those that could be obtained in arm's length dealings with an unrelated third person;
- The transaction is approved by the majority of the disinterested members of the Board; or
- If the transaction involves compensation, it is approved by the Compensation Committee or the Board.

Under our related person transactions policy, transactions between a related person and AMAG that are available to all employees generally and transactions with a related person in a given fiscal year that involve an aggregate of less than \$10,000 must be reported to the Board but do not require

approval. In addition, related person transactions should be submitted to the Audit Committee for approval or preliminarily entered into by management subject to ratification by the Audit Committee, provided, that, if such ratification shall not be forthcoming, management must make all reasonable efforts to cancel or annul such transaction. In determining whether to approve a related person transaction, consideration is given to whether approval thereof would affect the independent status of any current member of our Board. If approval of a transaction would cause less than a majority of our Board to be independent, such transaction will not be approved.

Other than the compensation arrangements for our named executive officers and directors, which are described elsewhere in the "Executive Compensation" and "Director Compensation" sections of this proxy statement, no related person transactions occurred or were brought to the attention of the Audit Committee for consideration in 2019.

SETTLEMENT AGREEMENT WITH CALIGAN PARTNERS

In October 2019, we entered into the Settlement Agreement with Caligan Partners LP, Mr. Johnson and Mr. Fonteyne (the foregoing, collectively with each of their respective affiliates, the "Investor Group"), pursuant to which we appointed Mr. Johnson and Mr. Fonteyne to our Board, and agreed to nominate Mr. Johnson and Mr. Fonteyne for election to the Board at the Annual Meeting. Also effective upon entry into the Settlement Agreement, the Investor Group withdrew its definitive consent statement soliciting written consents from the stockholders of the Company to approve certain proposals of the Investor Group. The Settlement Agreement provides that, in the event the Investor Group ceases to beneficially own the lesser of (x) at least 5% of our then outstanding common stock and (y) 1,700,000 shares of our common stock, in each case subject to adjustment for stock splits, combinations and recapitalizations (the "Ownership Minimum"), Mr. Johnson or Mr. Fonteyne (or their replacements) will immediately resign from the Board.

During the term of the Settlement Agreement and as long as the Investor Group owns shares of the Company's common stock exceeding the Ownership Minimum, the Investor Group is entitled to designate a replacement independent director in the event (i) Mr. Johnson ceases to be a director of the Company due to death, disability or other incapacity or (ii) Mr. Fonteyne is no longer able or willing to serve as a director of the Company for any reason, subject to approval (not to be unreasonably withheld) of any replacement independent director by the Governance and Risk Committee of the Board.

The Settlement Agreement also includes customary standstill restrictions for the Investor Group, including restrictions on acquiring beneficial ownership of more than 12.5% of our outstanding common stock, nominating or recommending for nomination any persons for election to our Board (except as expressly permitted by the Settlement Agreement), submitting any proposal for consideration at any stockholder meeting and soliciting any proxy, consent or other authority to vote from stockholders or conducting any other referendum (including any "withhold," "vote no" or similar campaign). The Settlement Agreement also provides that the size of our Board will not be increased to more than nine directors after the Annual Meeting unless at least two-thirds of the Board approves the increase,

During the term of the Settlement Agreement, the Investor Group will vote all of its shares of our common stock at all annual and special meetings and any consent solicitations of our stockholders in accordance with the Board's recommendations, subject to certain exceptions relating to extraordinary transactions and the recommendations of Institutional Shareholder Services, Inc. and Glass Lewis & Co., LLC.

The Settlement Agreement will terminate 30 days prior to the director nomination deadline for the Company's 2021 annual meeting of stockholders; however, it will be extended to 30 days prior to the director nomination deadline for the Company's 2022 annual meeting of stockholders if (i) at least

45 days prior to the director nomination deadline for the 2021 annual meeting, we notify the Investor Group that we intend to renominate the Investor Group Designees at the 2021 annual meeting; and (ii) at least 31 days prior to the director nomination deadline for the 2021 annual meeting, the Investor Group and each Investor Group Designee consents to such renomination.

CODE OF ETHICS

Our Board has adopted a code of ethics that applies to our officers, directors and employees. We have posted the text of our code of ethics on our website at www.amagpharma.com in the "Investors" section. In addition, and in accordance with Item 5.05 of Form 8-K, if any changes is made to the provisions of our code of ethics enumerated in Item 406(b) of Regulation S-K, we intend to disclose within four business days, on our website (or in any other medium required by law or the rules of Nasdaq): (a) the date and nature of any such amendment to our code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (b) the nature of any such waiver, including an implicit waiver, from a provision of our code of ethics that is granted to one of these specified officers, the name of such person who is granted the waiver, and the date of the waiver.

DIRECTOR COMPENSATION

Overview

We seek to attract exceptional talent to serve on the Board and, therefore, our policy is to compensate directors competitively relative to comparable companies. In addition, our Corporate Governance Guidelines provide that directors should be incentivized to focus on long-term stockholder value. The Board believes that including equity as part of director compensation helps align the interests of directors with those of our stockholders. Accordingly, director compensation is comprised of a mix of cash and equity compensation. The Board also believes that it is appropriate for the Chair of the Board and the Chair of each standing committee of the Board to receive additional compensation for the additional workload and time commitment required for Board members who serve in such capacities.

Non-Employee Director Compensation Policy

Our Non-Employee Director Compensation Policy ("Director Compensation Policy") applies to each director of AMAG who is not an employee or affiliate of AMAG. Under its charter, the Compensation Committee is charged with periodically reviewing and making recommendations to the Board with respect to director compensation. In addition, our Corporate Governance Guidelines provide that management and/or the Compensation Committee shall, from time to time, present a report to the Board comparing our director compensation to that of comparable peer companies. Accordingly, the Compensation Committee will, from time to time, retain an independent compensation consulting firm to conduct a comprehensive independent review of our overall non-employee director compensation practices relative to our peer group based on data collected from our peer companies' proxy statements. The peer group is generally comprised of public biotechnology companies that are comparable in terms of the number of employees, revenue and market capitalization at that time.

In April 2019, based on the recommendation of the Compensation Committee, the Board amended our Director Compensation Policy to provide that the aggregate amount of compensation, including both equity compensation and cash compensation, that may be paid to any non-employee director in a calendar year shall not exceed \$750,000 for the first year of service and \$500,000 for each year of service thereafter. Such director compensation limits are also specified in our 2019 Equity Incentive Plan.

The following is a summary of compensation under our current Director Compensation Policy:

Equity Grant Upon Initial Appointment or Election as a Director

Under the Director Compensation Policy, each new non-employee director, on the date of his or her initial appointment or election to the Board, receives the following two equity awards under our shareholder-approved equity incentive plan then in effect:

- *Appointment Grant:* an award of a non-qualified stock option to purchase 6,000 shares of our common stock, with such option to vest in equal monthly installments over a period of two years from the date of his or her election to the Board, provided such non-employee director continues to serve as a member of the Board; and
- *Pro-rated Annual Grant:* an equity grant of non-qualified stock options and RSUs on the date of his or her appointment or election as described below under the heading "*Annual Equity Grant*"; provided, that the amount of options and RSUs will be pro-rated based on the number of expected months of service before the next annual meeting of stockholders, and provided further that the awards will vest in equal monthly installments beginning on the first day of the first full month following his or her appointment or election and continuing on the first day of each month thereafter through the first day of the month in which the next annual meeting of stockholders is to be held so long as the director continues to serve as a member of the Board.

Annual Equity Grant

At the first meeting of the Board following the annual meeting of stockholders, each non-employee director, including the Chair, receives an equity grant with a target value of approximately \$175,000, with 50% of such value to be delivered in the form of options and the remaining 50% of such value to be delivered in the form of RSUs. These annual equity grants vest in twelve equal monthly installments beginning on the first day of the first full month following the annual meeting of stockholders and continuing on the first day of each of the following eleven months thereafter, so long as the director continues to serve as a member of the Board. In addition, the Director Compensation Policy provides that the delivery of any vested shares of common stock underlying the foregoing RSUs be deferred until the earlier of (a) the first anniversary of the date of grant and (b) the date of the director's separation from service.

Early Termination of Options or RSUs Upon Termination of Service

If a non-employee director ceases to be a member of the Board for any reason, any then vested and unexercised options granted to such non-employee director may be exercised by the departing director (or, in the case of the director's death or disability, by the director's personal representative, or the director's survivors) within three years after the date the director ceases to be a member of the Board and in no event later than the expiration date of the option. In addition, all then-vested and undelivered shares underlying any RSUs held by such director shall be delivered to him or her (or, in the case of the director's death or disability, to the director's personal representative, or the director's survivors) as of the date he or she ceases to be a member of the Board. If a non-employee director ceases to be a member of the Board for any reason, or otherwise ceases to continue a business relationship with AMAG, any unvested options and RSUs are immediately terminated and forfeited.

Retainer and Per Meeting Fees

The annual Board retainer fees under the Director Compensation Policy are payable in four equal quarterly installments, to each non-employee director for membership on our Board and for membership on each of the Board's standing committees. The annual Board and committee retainer

fees are included in the table below, along with the per meeting fees that our non-employee directors are entitled to receive for ad hoc committee attendance.

Membership	Retainer Fees (\$)	Per Meeting Fees (\$)
Board		
Non-chair member	50,000	N/A
Chair	95,000	N/A
Audit Committee		
Non-chair member	12,500	N/A
Chair	25,000	N/A
Compensation Committee		
Non-chair member	10,000	N/A
Chair	20,000	N/A
Governance and Risk Committee		
Non-chair member	7,500	N/A
Chair	15,000	N/A
Ad Hoc Committees		
Non-chair member	N/A	1,000
Chair	N/A	2,000

Under the Director Compensation Policy, the Board has reserved the right to institute a per meeting fee for each Board or committee meeting which is meaningfully in excess of the regularly scheduled meetings (a "Special Meeting"), including a per meeting fee of \$1,000 for each Special Meeting of the Board and a per meeting fee of \$500 for each meeting which is meaningfully in excess of the regularly scheduled meetings of the Audit, Compensation, and Governance and Risk Committees attended by such non-employee director. It is expected that Special Meetings of the Board and the committees may be called when necessary to address material matters faced by the Company outside of the ordinary course of business. No such payments were made during 2019.

Expenses

Upon presentation of documentation of such expenses reasonably satisfactory to the Company, each non-employee director is reimbursed for his or her reasonable out-of-pocket business expenses incurred in connection with attending meetings of the Board, committees thereof or in connection with other Board-related business.

Non-Employee Directors' Deferred Compensation Program

In April 2019, we implemented a Non-Employee Directors' Deferred Compensation Program to offer our non-employee directors the ability to defer the receipt of any RSUs granted to them under our equity incentive plan. In advance of an award of RSUs and in compliance with the program's requirements, a non-employee director may elect to defer the receipt of all of his or her RSUs until the earlier of (i) the date such non-employee director ceases to serve as a member of our Board and (ii) the consummation of a sale event (such earlier date, the "Payment Event"). Upon the vesting of the RSUs, any amounts that would otherwise have been paid in shares of Company common stock will be converted into deferred stock units ("DSUs") on a one-to-one basis and credited to the non-employee director's deferred account. The DSUs will be settled in shares of our common stock on a one-to-one basis in a single transaction (and will cease to be held in the non-employee director's deferred account) as soon as practicable following the Payment Event.

Indemnification and Insurance

We provide standard indemnification agreements and director and officer insurance for all directors.

Summary of Director Compensation for Fiscal 2019

The following table summarizes the compensation paid to or earned by our non-employee directors during the year ended December 31, 2019.

Name(1)	Fees Earned or Paid in	Stock Awards	Option Awards	Total
	Cash \$(2)	\$(3)	\$(3)	(\$)
Barbara Deptula(4)	62,500	87,490	87,496	237,486
John A. Fallon, M.D.(5)	75,000	87,490	87,496	249,986
Paul Fonteyne(6)	15,000	51,011	83,441	149,452
David Johnson(7)	15,625	51,011	83,441	150,077
Robert J. Perez(8)	57,500	87,490	87,496	232,486
Lesley Russell, MB.Ch.B., MRCP(9)	26,250	—	—	26,250
Gino Santini(10)	105,000	87,490	87,496	279,986
Davey S. Scoon(11)	82,500	87,490	87,496	257,486
James R. Sulat(12)	67,188	87,490	87,496	242,174
Anne M. Phillips, M.D., FRCPC(13)	35,852	94,777	131,200	261,829
Katherine O'Brien (14)	43,665	94,777	131,200	269,642

- (1) Mr. Heiden, who is also our chief executive officer, received no additional compensation for his service on our Board and is therefore not included in this table.
- (2) Represents the aggregate dollar amount of fees earned or paid in cash for services performed in 2019 as a director, including annual retainer fees, committee fees and per meeting fees.
- (3) Amounts shown do not reflect compensation actually received by the listed directors but represent the aggregate grant date fair value of equity awards, which consist of RSUs and stock option awards granted to our non-employee directors calculated in accordance with current accounting guidance for stock-based compensation, disregarding adjustments for forfeiture assumptions. The assumptions used to value the stock option awards are set forth in Note B to our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on March 6, 2020. The reported value of the RSUs awarded in 2019 was calculated by multiplying the closing market price of a share of our common stock on the grant date by the number of RSUs granted.
- (4) As of December 31, 2019, Ms. Deptula held outstanding stock options to purchase 63,991 shares and RSUs covering 8,116 shares of our common stock.
- (5) As of December 31, 2019, Dr. Fallon held outstanding stock options to purchase 59,875 shares and RSUs covering 8,116 shares of our common stock.
- (6) As of December 31, 2019, Mr. Fonteyne held outstanding stock options to purchase 15,452 shares and RSUs covering 4,407 shares of our common stock.
- (7) As of December 31, 2019, Mr. Johnson held outstanding stock options to purchase 15,452 shares and RSUs covering 4,407 shares of our common stock.
- (8) As of December 31, 2019, Mr. Perez held outstanding stock options to purchase 71,541 shares and RSUs covering 8,116 shares of our common stock.

- (9) Dr. Russell did not stand for re-election at our 2019 annual meeting of stockholders. Amount reflects fees earned by Dr. Russell during 2019 prior to the 2019 annual meeting of stockholders. As of December 31, 2019, Dr. Russell held outstanding stock options to purchase 52,386 shares of our common stock.
- (10) As of December 31, 2019, Mr. Santini held outstanding stock options to purchase 73,491 shares and RSUs covering 8,116 shares of our common stock.
- (11) As of December 31, 2019, Mr. Scoon held outstanding stock options to purchase 71,541 shares and RSUs covering 8,116 shares of our common stock.
- (12) As of December 31, 2019, Mr. Sulat held outstanding stock options to purchase 61,458 shares and RSUs covering 8,116 shares of our common stock.
- (13) As of December 31, 2019, Dr. Phillips held outstanding stock options to purchase 24,526 shares and RSUs covering 8,680 shares of our common stock.
- (14) As of December 31, 2019, Ms. O'Brien held outstanding stock options to purchase 24,526 shares and RSUs covering 8,680 shares of our common stock.

Director Stock Ownership Guidelines

The Board believes that it is important that directors be incentivized to focus on long-term stockholder value to ensure that the Board's interests are aligned with those of our stockholders and as such maintains stock ownership guidelines to further align the interests of our non-employee directors with the interests of our stockholders and to promote our commitment to sound corporate governance.

Our non-employee director stock ownership guidelines require all non-employee directors to hold shares of our common stock with a value equal to three times the amount of the annual cash retainer fee paid to non-employee directors for service on the Board, excluding additional committee retainer fees and any per meeting fees, if any. These ownership guidelines are initially calculated using the base annual retainer fee for service as a non-employee director as of the date the person first became subject to the guidelines as a non-employee director and are re-calculated and reviewed annually on the date of the annual meeting of stockholders based on the applicable annual Board retainer fee in effect on such calculation date. For purposes of this calculation, the value of a share is measured on the date of our annual meeting of stockholders each year based on the average closing price over the 30 days preceding the date of calculation. Certain of our non-employee directors may not currently be in compliance with our non-employee director stock ownership guidelines. Among other factors, the decrease in our stock price and recent market volatility have negatively affected the per share value used in calculating whether the ownership guidelines are satisfied. In light of such recent and expected future market volatility, it is possible that certain of non-employee directors will not be in compliance as of the date of the Annual Meeting.

Non-employee directors are required to achieve the applicable level of ownership within five years of the later of the date the guidelines were adopted and the date the person first became a non-employee director. In the event that a non-employee director does not meet the foregoing stock ownership guidelines, such non-employee director is prohibited from selling any stock acquired through vesting of RSUs or similar full-value awards or upon the exercise of stock options, except to pay for applicable taxes or the exercise price, and must use the entire net after tax amount of his or her base annual retainer fee, excluding additional committee retainer and meeting fees, if any, to purchase shares of Company common stock until the director satisfies the requirements.

Shares that count toward satisfaction of the guidelines include shares owned outright by the director or his or her immediate family members residing in the same household and shares held in

trust for the benefit of the director or his or her family. Unexercised and/or unvested equity awards do not count toward satisfaction of the guidelines.

Our non-employee director stock ownership guidelines may be waived, at the discretion of the Governance and Risk Committee, for directors joining the Board from government, academia, or similar professions. The guidelines may also be waived at the discretion of the Governance and Risk Committee if compliance would create undue hardship or prevent a director from complying with a court order, as in the case of a divorce settlement. It is expected that these instances will be rare. No waivers have been granted in connection with the recent market volatility.

PROPOSAL 2: APPROVAL OF THE AMAG PHARMACEUTIALS, INC. STOCK OPTION EXCHANGE PROGRAM FOR NON-EXECUTIVE EMPLOYEES

Introduction

We are seeking stockholder approval of an option exchange program that would allow certain employees who are not executive officers to exchange significantly out-of-the-money stock options for the issuance of new stock options that will be exercisable for fewer shares of our common stock, with an exercise price equal to the fair market value of our common stock on the new grant date and with new vesting terms and a new expiration date ("New Options"). We would like to offer this program to our employees because we believe that it will provide a more cost-effective retention and incentive tool than issuing additional equity or paying cash compensation in order to continue to retain and motivate our non-executive employees. Based on the number of outstanding stock options as of March 31, 2020, and assuming that all Eligible Options (defined below) are exchanged for New Options and the option exchange program closes on July 1, 2020, we estimate a reduction in our overhang of outstanding stock options of approximately 761,000 shares.

Overview

At the end of 2019, our Compensation Committee began considering, with input from Radford, which is part of the Rewards Solution practice at Aon plc ("Radford"), an independent compensation consultant, whether an option exchange program would assist with our retention efforts. After a series of discussions and after consideration of various design alternatives, in March 2020, our Compensation Committee recommended to our Board, and our Board subsequently authorized, that we pursue a stock option exchange program for current employees (*i.e.*, excluding former employees, members of our Board and our executive officers) (the "Non-Executive Option Exchange Program"), subject to stockholder approval. A stock option exchange program for our executive officers is subject to a different proposal, and neither proposal will include members of our Board.

Pursuant to the Non-Executive Option Exchange Program, stock options will be eligible for the program ("Eligible Options") if (1) they are outstanding as of the closing of the Non-Executive Option Exchange Program and (2) they have exercise prices per share greater than or equal to: the greater of (a) the 52-week intra-day high of the Company's common stock, as quoted on the Nasdaq Global Select Market (which, as of the 52-week period ending March 31, 2020, was \$13.53), and (b) 1.5 times the price per share of Company's common stock on the commencement date of the Non-Executive Option Exchange Program (the "Threshold Exercise Price"). Stock options can be Eligible Options regardless of whether they were granted as standalone inducement option awards or under one of our equity incentive plans and are held by current employees at the date of the closing of the Non-Executive Option Exchange Program, excluding our executive officers ("Eligible Participants"). If any Eligible Options are exchanged in the Non-Executive Option Exchange Program, the New Options shall be granted under and be subject to our 2019 Equity Incentive Plan (the "2019 Plan").

Under the proposed Non-Executive Option Exchange Program, if approved by our stockholders, each New Option will: (1) have an exercise price per share equal to the closing price of our common stock as reported by NASDAQ on the date the New Options are granted, which is expected to be the day after our exchange offer expires (the "Grant Date"), (2) have a term that expires on the sixth anniversary of the Grant Date, and (3) not be exercisable on the date they are granted, even if the corresponding exchanged Eligible Options had previously vested, and instead will vest and become exercisable in two equal annual installments following the Grant Date, subject to the continuous service of the Eligible Participant.

The New Options will be exercisable for fewer shares of our common stock than the Eligible Options in accordance with an exchange ratio as described below. Except as described above, the New

Options will otherwise have substantially the same terms and conditions as the corresponding exchanged Eligible Options.

We believe that, if approved by the stockholders, the Non-Executive Option Exchange Program could permit us to:

- enhance long-term stockholder value by restoring competitive incentives to the participants so they are further motivated to complete and deliver the important strategic and operational initiatives of our company, as exercise prices significantly in excess of market price undermine the effectiveness of options as employee performance and retention incentives; and
- reduce potential overhang, which is the number of shares issuable upon the exercise of outstanding stock options and other stock awards, by reducing the total number of outstanding stock options by approximately 761,000 of which approximately 290,000 were issued as inducement options or issued from the Lumara Health Inc. Amended and Restated 2013 Incentive Compensation Plan (the "2013 Lumara Health Equity Incentive Plan") and may not be returned to the 2019 Plan (these amounts are estimates only; the actual overhang reduction will depend upon a number of factors, including the number of Eligible Options exchanged and the applicable exchange ratios).

Under the listing rules of NASDAQ and our stock option plans, stockholder approval is required to implement the Non-Executive Option Exchange Program. If our stockholders approve this proposal, our Board intends to commence the exchange offer as soon as practicable following the annual meeting, but in no event later than 12 months thereafter. If we do not obtain stockholder approval of this proposal, we will not be able to implement the Non-Executive Option Exchange Program.

Reasons for the Non-Executive Option Exchange Program

We believe that an effective and competitive employee incentive program is imperative for the future growth and success of our business. We rely on our employees to implement our strategic initiatives, expand and develop our business and satisfy customer needs. Competition for many of these employees, particularly in the pharmaceutical industry, is intense and many companies use stock options as a means of attracting, motivating and retaining their best employees. At our company, stock options constitute a key part of our incentive and retention programs because our Board believes that equity compensation encourages employees to act like owners of the business, motivating them to work toward our success and rewarding their contributions by allowing them to benefit from increases in the value of our shares.

When the Compensation Committee approves the grant of a stock option, it establishes the exercise price that the employee must pay to purchase shares of our common stock when the option is exercised. The per share exercise price is set at the closing price of a share of our common stock as reported by NASDAQ on the date the option is granted. Thus, an employee receives value only if he or she exercises an option and sells the purchased shares at a price that exceeds the stock option's exercise price.

Our stock price has experienced a significant decline during the past several years. As a result, many of our employees now hold stock options with exercise prices significantly higher than the current market price of our common stock. For example, nearly all of our outstanding stock options had exercise prices greater than the closing price of our common stock as reported by NASDAQ on March 31, 2020 of \$6.18. In addition, as of March 31, 2020, Eligible Participants held options to purchase 1,926,904 shares of our common stock with exercise prices ranging from \$5.76 per share to \$69.73 per share. The "out-of-the-money" options are no longer effective as performance and retention incentives. We believe that to enhance long-term stockholder value we need to maintain competitive employee incentive and retention programs. An equity stake in the success of our company is a critical

component of these programs. We believe the Non-Executive Option Exchange Program will provide us with an opportunity to restore for Eligible Participants an incentive to remain with us and contribute to the future growth and success of our business. Although we continue to believe that stock options are an important component of our employees' total compensation, many of our employees view their existing stock options as having little or no value due to the difference between the exercise prices and the current market price of our common stock. As a result, for many employees, these options are ineffective at providing the incentives and retention value that our Board believes is necessary to motivate our employees to increase long-term stockholder value.

When considering how best to continue to incentivize and reward our employees who have out-of-the-money stock options, the Compensation Committee engaged Radford to review and evaluate strategies to address this issue. Based on these recommendations and all relevant factors, we determined that a program under which employees could exchange stock options with an exercise price greater than or equal to a number determined using the Threshold Exercise Price calculation, was most attractive for a number of reasons, including the following:

- *Reasonable, Balanced Incentives.* We believe that the opportunity to exchange Eligible Options for New Options to be granted with fewer shares, together with a new minimum vesting requirement, represents a reasonable and balanced exchange program with the potential for a significant positive impact on employee retention, motivation and performance.
- *Reduction of the Number of Shares Subject to Outstanding Options.* In addition to the out-of-the-money options having little or no retention value, they also would not otherwise reduce our stock option overhang until they are exercised or expire unexercised. As of March 31, 2020, there were approximately 1,293,000 outstanding stock options with an exercise price equal to or greater than \$13.53 per share, with a weighted average exercise price of \$25.38, that would be eligible stock options for purposes of the Non-Executive Option Exchange Program, excluding options that will expire by their terms before July 1, 2020. If approved by our stockholders, the Non-Executive Option Exchange Program is expected to reduce our overhang of outstanding stock options by eliminating the ineffective options that are currently outstanding and issued to our non-executive employees. Under the proposed Non-Executive Option Exchange Program, Eligible Participants will receive stock options covering fewer shares than the exchanged Eligible Options. Based on the number of outstanding stock options as of March 31, 2020 and assuming that all Eligible Options are exchanged in the Non-Executive Option Exchange Program and the Non-Executive Option Exchange closes on July 1, 2020, we estimate Eligible Options to purchase approximately 1,293,000 shares would be exchanged and cancelled, while New Options covering approximately 532,000 shares would be issued. This could result in a net reduction in the overhang of our equity awards by approximately 761,000 shares, or approximately 2.02% of the fully diluted number of shares of our common stock outstanding as of March 31, 2020, of which approximately 290,000 were issued as inducement options or issued from the 2013 Lumara Health Equity Incentive Plan and may not be returned to the 2019 Plan. The actual reduction in our overhang that may result from the Non-Executive Option Exchange Program could vary significantly and is dependent upon a number of factors, including the actual level of participation in the Non-Executive Option Exchange Program and the actual exchange ratios. All Eligible Options that are not exchanged will remain outstanding and in effect in accordance with their existing terms.
- *Reduced Pressure for Additional Grants.* If we are unable to implement the Non-Executive Option Exchange Program, we may find it necessary to issue additional options to our employees at current market prices, increasing our overhang. These grants would deplete the current pool of options available for future grants under our 2019 Plan and would also result in increased stock compensation expense, which could negatively impact our stock price.

- *Impact on accounting expense.* Under applicable accounting rules, we are required to continue to recognize compensation expense related to these underwater stock options as they vest, even if they are never exercised because they remain underwater. We believe the Non-Executive Option Exchange Program will allow us to recapture retentive and incentive value from the compensation expense that we have recorded in our financial statements with respect to our Eligible Options. The New Options are not expected to result in significant additional compensation expense and therefore will not have a material adverse impact on our reported earnings.

Description of the Material Terms of the Non-Executive Option Exchange Program

Implementing the Non-Executive Option Exchange Program. We will not commence the Non-Executive Option Exchange Program unless our stockholders approve this proposal. If our stockholders approve this proposal, and our Board or Compensation Committee determine to implement the Non-Executive Option Exchange Program, we expect the Non-Executive Option Exchange Program to commence within twelve months of the date of the annual meeting. If the Non-Executive Option Exchange Program does not commence within this time frame, we would not conduct another option exchange program without first seeking stockholder approval. Even if the Non-Executive Option Exchange Program is approved by our stockholders, our Board will retain the authority, in its sole discretion, to terminate or postpone the program at any time prior to the closing of the tender offer or to exclude certain Eligible Options or Eligible Participants from participating in the Non-Executive Option Exchange Program due to tax, regulatory or accounting reasons or because participation would be inadvisable or impractical.

Upon the offer date, Eligible Participants will receive a written offer setting forth the terms of the Non-Executive Option Exchange and may voluntarily elect to participate. The written offer will be governed by the tender offer rules of the SEC. At or before the offer date, we will file the offer to exchange and other related documents with the SEC as part of a tender offer statement on Schedule TO. Pursuant to the SEC tender offer rules, we will give Eligible Participants at least 20 business days to elect to surrender Eligible Options in exchange for a lesser amount of New Options.

Outstanding Options Eligible for the Non-Executive Option Exchange Program. To be eligible for exchange under the Non-Executive Option Exchange Program, an option must have an exercise price that is greater than or equal to the Threshold Exercise Price and be outstanding as of the closing of the Non-Executive Option Exchange Program. As of March 31, 2020, options to purchase approximately 1,927,000 shares of our common stock were outstanding, of which options to purchase approximately 1,293,000 shares would be eligible for exchange under the Non-Executive Option Exchange Program (assuming the Non-Executive Option Exchange Program closes on July 1, 2020) and using a Threshold Exercise Price of \$13.53 for the calculation.

Eligibility. The Non-Executive Option Exchange Program will be open to all of our current employees, excluding our executive officers. Neither our executive officers, former employees nor members of our Board will be eligible to participate in the Non-Executive Option Exchange Program. However, our executive officers may be able to participate in a different exchange program, which is the subject of Proposal 3, which is described elsewhere in this proxy statement. To be eligible, an employee must be employed by us at the time the tender offer commences. Additionally, to receive the New Options, an Eligible Participant who exchanges his or her Eligible Options must be an employee on the Grant Date. As of March 31, 2020, approximately 341 employees, excluding our executive officers, held Eligible Options.

Calculation of Exchange Ratios. The Non-Executive Option Exchange Program is not a one-for-one exchange. The total number of shares of our common stock underlying a New Option that an Eligible Participant will receive with respect to an exchanged Eligible Option will be determined by

dividing the number of shares of our common stock underlying the exchanged Eligible Option by the applicable exchange ratio and rounding to the nearest whole number.

Shortly before the commencement of the Non-Executive Option Exchange Program, our Compensation Committee will determine exchange ratios by assigning an average exchange ratio to each of the pools of outstanding stock options. The exchange ratios will be applied on a grant-by-grant basis and will generally be designed to result in a fair value, for accounting purposes, of the New Options that will be approximately equal to the fair value of the Eligible Options (based on valuation assumptions made shortly before the Non-Executive Option Exchange Program commences). The exchange ratios will be established by grouping together Eligible Options with certain exercise prices and assigning an appropriate exchange ratio to each grouping, based on the fair value of the Eligible Options (calculated using the Black-Scholes model in compliance with ASC Topic 718) within the relevant grouping. Setting the exchange ratios in this manner is intended to result in the issuance of New Options that have a fair value (also calculated using the Black-Scholes model in compliance with ASC Topic 718) that is approximately equal to the fair value of the exchanged Eligible Options. This should minimize any additional compensation cost that we must recognize upon granting the New Options, other than some incremental compensation expense that might result from fluctuations in the fair market value of our common stock after the exchange ratios have been set but before the Grant Date.

Although the exchange ratios cannot be determined prospectively because the fair market value of our common stock will change prior to commencement of the Non-Executive Option Exchange Program, the table below provides an example of the exchange ratios that our Compensation Committee would use if the fair market value of our common stock is \$6.18 per share shortly before the commencement of the Non-Executive Option Exchange Program. As illustrated in the table below, the applicable exchange ratios will vary based on the exercise price of the Eligible Option.

If the Exercise Price of an Eligible Option is:	The Exchange Ratio would be (Eligible Options to New Options):
\$13.53 to \$17.24	1.75 for 1
\$17.25 to \$24.85	2.25 for 1
\$24.86 to \$43.41	3.75 for 1
\$43.42 to \$57.60	9.00 for 1
\$57.61 to \$69.73	11.00 for 1

In this example, if an Eligible Participant elected to exchange an Eligible Option to purchase 1,000 shares with an exercise price of \$15 per share, that Eligible Participant would receive a New Option to purchase 571 shares (that is, 1,000 divided by 1.75, with the result rounded to the nearest whole number, equals 571).

For illustrative purposes only, the following table shows the number of shares of our common stock underlying outstanding Eligible Options as of March 31, 2020, excluding for this purpose, any

Eligible Options that expire by their terms on or prior to an assumed closing date of the Non-Executive Option Exchange Program of July 1, 2020, categorized by the exchange ratios in the example above.

Exercise Price Range of Eligible Options	Maximum Number of Shares Underlying Eligible Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in Years)
\$13.53 to \$17.24	303,467	\$ 16.00	7.45
\$17.25 to \$24.85	631,452	\$ 21.61	7.43
\$24.86 to \$43.41	251,144	\$ 33.28	5.90
\$43.42 to \$57.60	69,250	\$ 50.65	4.95
\$57.61 to \$69.73	37,800	\$ 64.74	5.28

Election to Participate. Participation in the Non-Executive Option Exchange Program will be voluntary. Eligible Participants will be permitted to exchange all or none of their Eligible Options for New Options on a grant-by-grant basis.

Exercise Price of New Options. All New Options will be granted with an exercise price equal to the closing price of our common stock as reported by NASDAQ on the Grant Date.

Vesting of New Options. The New Options will not be exercisable on the date they are granted, even if the corresponding exchanged Eligible Options had previously become exercisable. The New Options will vest and become exercisable in two equal annual installments following the Grant Date, subject to the continuous service of the Eligible Participant.

Term of the New Options. The New Options will expire on the sixth anniversary of the Grant Date, which is shorter than the weighted average remaining term in aggregate of Eligible Options.

Other Terms and Conditions of the New Options. The other terms and conditions of the New Options will be set forth in an option agreement to be entered into as of the Grant Date. Any additional terms and conditions will be comparable to the other terms and conditions of the Eligible Options. All New Options will be incentive stock options (that is, they will qualify for the tax-favored treatment under Section 422 of the Code) to the extent allowable. The shares of our common stock for which the New Options may be exercised are currently registered on a registration statement filed with the SEC.

Treatment of Net Shares. The Eligible Options exchanged for New Options will be cancelled. The net shares underlying the Eligible Options granted under the 2007 Plan or 2019 Plan in excess of the shares underlying the New Options will be returned to the pool available for issuance under the 2019 Plan. All other Eligible Options, including those issued as inducement options or issued from the 2013 Lumara Health Equity Incentive Plan, that are exchanged for New Options will not be returned to any pool of shares available under our equity incentive plans.

Accounting Treatment. The incremental compensation expense associated with the Non-Executive Option Exchange Program will be measured as the excess, if any, of the fair value of each new stock option granted to participants in the Non-Executive Option Exchange Program, measured as of the date the new stock options are granted, over the fair value of the stock options surrendered in exchange for the new stock options, measured immediately prior to the cancellation. We do not expect the incremental compensation expense, if any, to be material. We will recognize any such incremental compensation expense ratably over the vesting period of the new stock options.

United States Federal Income Tax Consequences. The following is a summary of the anticipated material United States federal income tax consequences of participating in the Non-Executive Option Exchange Program. A more detailed summary of the applicable tax considerations to participants will

be provided in the tender offer. We believe the exchange of Eligible Options for New Options pursuant to the Non-Executive Option Exchange Program should be treated as a non-taxable exchange, and no income should be recognized for United States federal income tax purposes by us or our employees upon the grant of the New Options. However, the Internal Revenue Service is not precluded from adopting a contrary position, and the laws and regulations themselves are subject to change. A more detailed summary of the applicable tax considerations to Eligible Employees will be provided in the tender offer.

Potential Modifications to Terms to Comply with Governmental Requirements. The terms of the Non-Executive Option Exchange Program will be described in a tender offer that we will file with the SEC. Although we do not anticipate that the SEC will require us to modify the terms significantly, it is possible we will need to alter the terms of the Non-Executive Option Exchange Program to comply with comments from the SEC. Changes in the terms of the Non-Executive Option Exchange Program may also be required for tax purposes as the laws and regulations are subject to change.

Effect on Stockholders

We are not able to predict the impact the Non-Executive Option Exchange Program will have on your interests as a stockholder, as we are unable to predict how many participants will exchange their Eligible Options or what the fair market value of our common stock will be on the Grant Date. If the Non-Executive Option Exchange Program is approved, the exchange ratios will result in the issuance of fewer shares subject to the New Options than were subject to the exchanged Eligible Options and may result in an incremental compensation expense for financial reporting purposes. In addition, the Non-Executive Option Exchange Program is intended to reduce both our existing stock option overhang and our need to issue supplemental stock options in the future to remain competitive with our competitors. While we cannot predict how many Eligible Options will be exchanged, based on the number of outstanding stock options as of March 31, 2020 and assuming that all Eligible Options are exchanged in the Non-Executive Option Exchange Program and the Non-Executive Option Exchange Program closes on July 1, 2020, we estimate a reduction in our overhang of outstanding stock options of approximately 761,000 shares. The actual reduction in our overhang that could result from the Non-Executive Option Exchange Program could vary significantly and is dependent upon a number of factors, including the actual level of participation in the Non-Executive Option Exchange Program and the option exchange ratios. Based on these assumptions and following the issuance of the New Options, a net of approximately 471,000 shares will be returned to the share reserve of the 2019 Plan and approximately 290,000 shares were issued pursuant to inducement or awards of the 2013 Lumara Health Equity Incentive Plan and will not be available for future grant of awards under the 2019 Plan.

Vote Required

The affirmative vote of the holders of a majority of the shares of our common stock present or represented and voting at the Annual Meeting is required to approve the Non-Executive Option Exchange Program.

**OUR BOARD UNANIMOUSLY RECOMMENDS
A VOTE "FOR" THE APPROVAL OF
THE STOCK OPTION EXCHANGE PROGRAM FOR NON-EXECUTIVE EMPLOYEES.**

PROPOSAL 3: APPROVAL OF THE AMAG PHARMACEUTIALS, INC. STOCK OPTION EXCHANGE PROGRAM FOR CERTAIN EXECUTIVE EMPLOYEES

Introduction

We are also seeking stockholder approval of an option exchange program that would allow our executive officers (other than Mr. Heiden) to exchange significantly out-of-the-money stock options for the issuance of new stock options that will be exercisable for fewer shares of our common stock, with an exercise price equal to the fair market value of our common stock on the new grant date and with new vesting terms and a new expiration date ("New Executive Options"). We would like to offer this program to certain executives because, as with the Non-Executive Option Exchange Program, we believe that it will provide a more cost-effective retention and incentive tool to our executive officers than issuing additional equity or paying cash compensation in order to continue to retain and motivate our executive employees. Based on the number of outstanding stock options as of March 31, 2020 and assuming that all Eligible Executive Options (defined below) are exchanged for New Executive Options and the option exchange program closes on July 1, 2020, we estimate a reduction in our overhang of outstanding stock options of approximately 198,000 shares.

Overview

Along with its discussions regarding the Non-Executive Option Exchange Program, at the end of 2019, our Compensation Committee began considering, with input from Radford, which is part of the Rewards Solution practice at Aon plc ("Radford"), an independent compensation consultant, whether an option exchange program for certain of our executive officers would assist with our retention efforts. After a series of discussions and after consideration of various design alternatives, in March 2020, our Compensation Committee recommended to our Board, and our Board subsequently authorized, that we pursue a stock option exchange program for all of our current executive officers other than our CEO, Mr. Heiden (the "Executive Option Exchange Program"), subject to stockholder approval. A stock option exchange program for certain employees who are not executive officers is subject to a different proposal and neither proposal will include members of our Board.

Pursuant to the Executive Option Exchange Program, stock options will be eligible for the program ("Eligible Executive Options") if (1) they are outstanding as of the closing of the Executive Option Exchange Program and (2) they have exercise prices per share greater than or equal to the greater of (a) the 52-week intra-day high of the Company's common stock, as quoted on the Nasdaq Global Select Market (which, as of the 52-week period ending March 31, 2020, was \$13.53), and (b) 1.5 times the price per share of Company's common stock on the commencement date of the Executive Option Exchange Program (the "Threshold Exercise Price"). Stock options can be Eligible Executive Options regardless of whether they were granted as standalone inducement option awards or under one of our equity incentive plans and are held by Eligible Executives (as defined below) who are current employees at the date of the closing of the Executive Option Exchange Program. If any Eligible Executive Options are exchanged in the Executive Option Exchange Program, the New Executive Options shall be granted under and be subject to our 2019 Plan.

Under the proposed Executive Option Exchange Program, if approved by our stockholders, each New Executive Option will: (1) have an exercise price per share equal to the closing price of our common stock as reported by NASDAQ on the date the New Executive Options are granted, which is expected to be the day after our exchange offer expires (the "Executive Grant Date"), (2) have a term that expires on the sixth anniversary of the Executive Grant Date, and (3) not be exercisable on the date they are granted, even if the corresponding exchanged Eligible Executive Options had previously vested, and instead will vest and become exercisable in two equal annual installments following the Executive Grant Date, subject to the continuing service of the Eligible Executive.

The New Executive Options will be exercisable for fewer shares of our common stock than the Eligible Executive Options in accordance with an exchange ratio as described below. Except as described above, the New Executive Options will otherwise have substantially the same terms and conditions as the corresponding exchanged Eligible Executive Options.

We believe that, if approved by the stockholders, the Executive Option Exchange Program could permit us to:

- enhance long-term stockholder value by restoring competitive incentives to the participants so they are further motivated to complete and deliver the important strategic and operational initiatives of our company, as exercise prices significantly in excess of market price undermine the effectiveness of options as employee performance and retention incentives; and
- reduce potential overhang, which is the number of shares issuable upon the exercise of outstanding stock options and other stock awards, by reducing the total number of outstanding stock options by 198,000 of which 92,000 were issued as inducement options or issued from the Lumara Health Inc. Amended and Restated 2013 Incentive Compensation Plan (the "2013 Lumara Health Equity Incentive Plan") and may not be returned to the 2019 Plan (these amounts are estimates only; the actual overhang reduction will depend upon a number of factors, including the number of Eligible Executive Options exchanged and the applicable exchange ratios).

Under the listing rules of NASDAQ and our stock option plans, stockholder approval is required to implement the Executive Option Exchange Program. If our stockholders approve this proposal, our Board intends to commence the exchange offer as soon as practicable following the annual meeting, but in no event later than 12 months thereafter. If we do not obtain stockholder approval of this proposal, we will not be able to implement the Executive Option Exchange Program.

Reasons for the Executive Option Exchange Program

We believe that an effective and competitive executive incentive program is imperative for the future growth and success of our business. We rely on our executive officers to implement our strategic initiatives, expand and develop our business and satisfy customer needs. Furthermore, we believe it is important to incentivize the few eligible executives who have been with the Company for a number of years and whose equity compensation is "out-of-the-money" as further described below. The following table provides a summary of the four executives who are eligible for the Executive Option Exchange Program, with an average tenure with the Company as of March 31, 2020 of four years.

Eligible Executive	Role	Tenure in years
Edward Myles	Chief Financial Officer & Chief Operating Officer	3.9
Anthony Casciano	Chief Commercial Officer	3.6
Joseph Vittiglio	Chief Business Officer & General Counsel	4.6
Kelly Schick	Chief Human Resource Officer	3.5

When the Compensation Committee approves the grant of a stock option, it establishes the exercise price that the optionee must pay to purchase shares of our common stock when the option is exercised. The per share exercise price is set at the closing price of a share of our common stock as reported by NASDAQ on the date the option is granted. Thus, an optionee receives value only if he or she exercises an option and sells the purchased shares at a price that exceeds the option's exercise price.

Our stock price has experienced a significant decline during the past several years. As a result, many of our executive officers now hold stock options with exercise prices significantly higher than the current market price of our common stock. For example, 100% of our outstanding stock options held by our executive officers had exercise prices greater than the closing price of our common stock as

reported by NASDAQ on March 31, 2020 of \$6.18. In addition, as of March 31, 2020, Eligible Executives held options to purchase 465,056 shares of our common stock with exercise prices ranging from \$7.27 per share to \$57.60 per share. These "out-of-the-money" options which, as of March 31, 2020, represent approximately 67% of the shares underlying outstanding for plan-based equity awards held by the Eligible Executives, are no longer effective as performance and retention incentives. We believe that to enhance long-term stockholder value we need to maintain competitive executive incentive and retention programs. An equity stake in the success of our company is a critical component of these programs. We believe the Executive Option Exchange Program will provide us with an opportunity to restore for Eligible Executives an incentive to remain with us and contribute to the future growth and success of our business. Additionally, if we are unable to retain one or more of the Eligible Executives in the near term, it could impact our strategic continuity and cause us to incur additional costs of executive transition.

When considering how best to continue to incentivize and reward our executive officers who have out-of-the-money stock options, the Compensation Committee engaged Radford to review and evaluate strategies to address this issue. Based on these recommendations and all relevant factors, we determined that a program under which executive officers could exchange stock options with an exercise price greater than or equal to a number determined using the Threshold Exercise Price calculation was most attractive for a number of reasons, including the following:

- *Reasonable, Balanced Incentives.* We believe that the opportunity to exchange Eligible Executive Options for New Executive Options to be granted with fewer shares, together with a new minimum vesting requirement, represents a reasonable and balanced exchange program with the potential for a significant positive impact on employee retention, motivation and performance.
- *Reduction of the Number of Shares Subject to Outstanding Options.* In addition to the out-of-the-money options having little or no retention value, they also would not otherwise reduce our stock option overhang until they are exercised or expire unexercised. As of March 31, 2020, there were approximately 303,000 outstanding stock options with an exercise price equal to or greater than \$13.53 per share, with a weighted average exercise price of \$24.93, that would be eligible stock options for purposes of the Executive Option Exchange Program, excluding options that will expire by their terms by July 1, 2020. If approved by our stockholders, the Executive Option Exchange Program is expected to reduce our overhang of outstanding stock options by eliminating the ineffective options that are currently outstanding and issued to our executive employees. Under the proposed Executive Option Exchange Program, Eligible Executives will receive stock options covering fewer shares than the exchanged Eligible Executive Options. Based on the number of outstanding stock options as of March 31, 2020 and assuming that all Eligible Executive Options are exchanged in the Executive Option Exchange Program and the Executive Option Exchange Program closes on July 1, 2020, we estimate Eligible Executive Options to purchase approximately 303,000 shares would be exchanged and cancelled, while New Executive Options covering approximately 105,000 shares would be issued. This could result in a net reduction in the overhang of our equity awards by approximately 198,000 shares, or approximately 0.6% of the fully diluted number of shares of our common stock outstanding as of March 31, 2020, of which approximately 92,000 were issued as inducement options or issued from the 2013 Lumara Health Equity Incentive Plan and may not be returned to the 2019 Plan. The actual reduction in our overhang that may result from the Executive Option Exchange Program could vary significantly and is dependent upon a number of factors, including the actual level of participation in the Executive Option Exchange Program and the actual exchange ratios. All Eligible Executive Options that are not exchanged will remain outstanding and in effect in accordance with their existing terms.
- *Reduced Pressure for Additional Grants.* If we are unable to implement the Executive Option Exchange Program, we may find it necessary to issue additional options to our executive officers

at current market prices, increasing our overhang. These grants would deplete the current pool of options available for future grants under our 2019 Plan and would also result in increased stock compensation expense, which could negatively impact our stock price.

- *Impact on accounting expense.* Under applicable accounting rules, we are required to continue to recognize compensation expense related to these underwater stock options as they vest, even if they are never exercised because they remain underwater. We believe the Executive Option Exchange Program will allow us to recapture retentive and incentive value from the compensation expense that we have recorded in our financial statements with respect to our Eligible Executive Options. The New Executive Options are not expected to result in significant additional compensation expense and therefore will not have a material adverse impact on our reported earnings.

Description of the Material Terms of the Executive Option Exchange Program

Implementing the Executive Option Exchange Program. We will not commence the Executive Option Exchange Program unless our stockholders approve this proposal. If our stockholders approve this proposal, and our Board or Compensation Committee determine to implement the Executive Option Exchange Program, we expect the Executive Option Exchange Program to commence within twelve months of the date of the annual meeting. If the Option Exchange Program does not commence within this time frame, we would not conduct another option exchange program without first seeking stockholder approval. Even if the Executive Option Exchange Program is approved by our stockholders, our Board will retain the authority, in its sole discretion, to terminate or postpone the program at any time prior to the closing of the tender offer or to exclude certain Eligible Executive Options or Eligible Executives from participating in the Executive Option Exchange Program due to tax, regulatory or accounting reasons or because participation would be inadvisable or impractical.

Upon the offer date, Eligible Executives will receive a written offer setting forth the terms of the Executive Option Exchange and may voluntarily elect to participate. The written offer will be governed by the tender offer rules of the SEC. At or before the offer date, we will file the tender offer and other related documents with the SEC as part of a tender offer statement on Schedule TO. Pursuant to the SEC tender offer rules, we will give Eligible Executives at least 20 business days to elect to surrender Eligible Executive Options in exchange for a lesser amount of New Executive Options

Outstanding Options Eligible for the Executive Option Exchange Program. To be eligible for exchange under the Executive Option Exchange Program, an option must have an exercise price that is greater than the Threshold Exercise Price and be outstanding as of the closing of the Executive Option Exchange Program. As of March 31, 2020, options to purchase approximately 465,000 shares of our common stock were outstanding, of which options to purchase approximately 303,000 shares would be eligible for exchange under the Executive Option Exchange Program (excluding, in each case, options which would expire by their terms prior to July 1, 2020) using a Threshold Exercise Price of \$13.53 for the calculation.

Eligibility. The Executive Option Exchange Program will be open to all of our current executive officers, other than Mr. Heiden and other than members of the board of directors ("Eligible Executives"). The Compensation Committee determined that it was appropriate to exclude Mr. Heiden from the Executive Option Exchange Program in light of his previously announced departure and the stated goal of the Executive Option Exchange Program as a retention incentive. To be eligible, an executive officer must be employed by us at the time the tender offer commences. Additionally, to receive the New Executive Options, an Eligible Executive who exchanges his or her Eligible Executive Options must be an employee on the Executive Grant Date. As of March 31, 2020, four executive officers held Eligible Executive Options.

Calculation of Exchange Ratios. The Executive Option Exchange Program is not a one-for-one exchange. The total number of shares of our common stock underlying a New Executive Option that an Eligible Executive will receive with respect to an exchanged Eligible Executive Option will be determined by dividing the number of shares of our common stock underlying the exchanged Eligible Executive Option by the applicable exchange ratio and rounding to the nearest whole number.

Shortly before the commencement of the Executive Option Exchange Program, our Board or Compensation Committee will determine the exchange ratios by assigning an average exchange ratio to each of the pools of outstanding stock options. The exchange ratios for the Executive Option Exchange Program will be less favorable than the exchange ratios that will apply to the Option Exchange Program applicable to non-executive employees. The exchange ratios will be applied on a grant-by-grant basis and will generally be designed to result in a fair value, for accounting purposes, of the New Executive Options that will be approximately equal to the fair value of the Eligible Executive Options (based on valuation assumptions made shortly before the Executive Option Exchange Program commences). The exchange ratios will be established by grouping together Eligible Executive Options with certain exercise prices and assigning an appropriate exchange ratio to each grouping, based on the fair value of the Eligible Executive Options (calculated using the Black-Scholes model in compliance with ASC Topic 718) within the relevant grouping. Setting the exchange ratios in this manner is intended to result in the issuance of New Executive Options that have a fair value (also calculated using the Black-Scholes model in compliance with ASC Topic 718) approximately equal to the fair value of the exchanged Eligible Executive Options. This should minimize any additional compensation cost that we must recognize upon granting the New Executive Options, other than some incremental compensation expense that might result from fluctuations in the fair market value of our common stock after the exchange ratios have been set but before the Executive Grant Date.

Although the exchange ratios cannot be determined prospectively because the fair market value of our common stock will change prior to commencement of the Executive Option Exchange Program, the table below provides an example of the exchange ratios that our Board or Compensation Committee would use if the fair market value of our common stock is \$6.18 per share shortly before the commencement of the Executive Option Exchange Program. As illustrated in the table below, the applicable exchange ratios will vary based on the exercise price of the Eligible Executive Option.

If the Exercise Price of an Eligible Executive Option is:	The Exchange Ratio would be (Eligible Executive Options to New Executive Options):
\$13.53 to \$17.24	2.25 for 1
\$17.25 to \$24.85	2.75 for 1
\$24.86 to \$43.41	4.25 for 1
\$43.42 to \$57.60	9.50 for 1

In this example, if an Eligible Executive elected to exchange an Eligible Executive Option to purchase 1,000 shares with an exercise price of \$15 per share, that Eligible Executive would receive a New Executive Option to purchase 444 shares (that is, 1,000 divided by 2.25, with the result rounded to the nearest whole number, equals 444).

For illustrative purposes only, the following table shows the number of shares of our common stock underlying outstanding Eligible Executive Options, as of March 31, 2020, excluding for this purpose, any Eligible Executive Options that expire by their terms prior to an assumed closing of the

Executive Option Exchange Program of July 1, 2020, and the number of New Executive Options that could be issued, in each case, categorized by the exchange ratios in the example above.

Exercise Price Range of Eligible Executive Options	Eligible Options			New Executive Options	
	Maximum Number of Shares Underlying Eligible Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in Years)	Maximum Number of Shares Underlying New Executive Options	Term of New Executive Options (in Years)
\$13.53 to \$17.24	66,156	\$15.57	8.91	29,403	6
\$17.25 to \$24.85	186,900	\$22.97	7.13	67,964	6
\$24.86 to \$43.41	20,000	\$25.18	5.92	4,706	6
\$43.42 to \$57.60	30,000	\$57.60	5.40	3,158	6

Election to Participate. Participation in the Executive Option Exchange Program will be voluntary. Eligible Executives will be permitted to exchange all or none of their Eligible Executive Options for New Executive Options on a grant-by-grant basis.

Exercise Price of New Executive Options. All New Executive Options will be granted with an exercise price equal to the closing price of our common stock as reported by NASDAQ on the Executive Grant Date.

Vesting of New Executive Options. The New Executive Options will not be exercisable on the date they are granted, even if the corresponding exchanged Eligible Executive Options had previously become exercisable. The New Executive Options will vest and become exercisable in two equal annual installments following the Executive Grant Date, subject to the continuous service of the Eligible Executive.

Term of the New Executive Options. The New Executive Options will expire on the sixth anniversary of the Executive Grant Date, which represents a reduction from the current aggregate weighted average remaining life for Eligible Executives of approximately seven years.

Other Terms and Conditions of the New Executive Options. The other terms and conditions of the New Executive Options will be set forth in an option agreement to be entered into as of the Executive Grant Date. Any additional terms and conditions will be comparable to the other terms and conditions of the Eligible Executive Options. All New Executive Options will be incentive stock options (that is, they will qualify for the tax-favored treatment under Section 422 of the Code) to the extent allowable. The shares of our common stock for which the New Executive Options may be exercised are currently registered on a registration statement filed with the SEC.

Treatment of Net Shares. The Eligible Executive Options exchanged for New Executive Options will be cancelled. The net shares underlying the Eligible Executive Options granted under the 2007 Plan or 2019 Plan in excess of the shares underlying the New Executive Options will be returned to the pool available for issuance under the 2019 Plan. All other Eligible Executive Options, including those issued as inducement options or issued from the 2013 Lumara Health Equity Incentive Plan, that are exchanged for New Executive Options will not be returned to any pool of shares available under our equity incentive plans.

Accounting Treatment. The incremental compensation expense associated with the Executive Option Exchange Program will be measured as the excess, if any, of the fair value of each new stock option granted to participants in the Executive Option Exchange Program, measured as of the date the new stock options are granted, over the fair value of the stock options surrendered in exchange for the new stock options, measured immediately prior to the cancellation. We do not expect the incremental

compensation expense, if any, to be material. We will recognize any such incremental compensation expense ratably over the vesting period of the new stock options.

United States Federal Income Tax Consequences. The following is a summary of the anticipated material United States federal income tax consequences of participating in the Executive Option Exchange Program. A more detailed summary of the applicable tax considerations to participants will be provided in the tender offer. We believe the exchange of Eligible Executive Options for New Executive Options pursuant to the Executive Option Exchange Program should be treated as a non-taxable exchange, and no income should be recognized for United States federal income tax purposes by us or our employees upon the grant of the New Executive Options. However, the Internal Revenue Service is not precluded from adopting a contrary position, and the laws and regulations themselves are subject to change. A more detailed summary of the applicable tax considerations to Eligible Executives will be provided in the tender offer.

Potential Modifications to Terms to Comply with Governmental Requirements. The terms of the Executive Option Exchange Program will be described in a tender offer that we will file with the SEC. Although we do not anticipate that the SEC will require us to modify the terms significantly, it is possible we will need to alter the terms of the Executive Option Exchange Program to comply with comments from the SEC. Changes in the terms of the Executive Option Exchange Program may also be required for tax purposes as the laws and regulations are subject to change.

Effect on Stockholders

We are not able to predict the impact the Executive Option Exchange Program will have on your interests as a stockholder, as we are unable to predict how many participants will exchange their Eligible Executive Options or what the fair market value of our common stock will be on the Executive Grant Date. If the Executive Option Exchange Program is approved, the exchange ratios will result in the issuance of fewer shares subject to the New Executive Options than were subject to the exchanged Eligible Executive Options and may result in an incremental compensation expense for financial reporting purposes. In addition, the Executive Option Exchange Program is intended to reduce both our existing stock option overhang and our need to issue supplemental stock options in the future to remain competitive with our competitors. While we cannot predict how many Eligible Executive Options will be exchanged, based on the number of outstanding stock options as of March 31, 2020 and assuming that all Eligible Executive Options are exchanged in the Executive Option Exchange Program and the Executive Option Exchange Program closes on July 1, 2020, we estimate a reduction in our overhang of outstanding stock options of approximately 198,000 shares. The actual reduction in our overhang that could result from the Executive Option Exchange Program could vary significantly and is dependent upon a number of factors, including the actual level of participation in the Executive Option Exchange Program and the option exchange ratios. Based on this assumption, and following the issuance of the New Executive Options, a net of approximately 106,000 shares will be returned to the share reserve of the 2019 Plan and approximately 92,000 shares were issued pursuant to inducement or awards or the 2013 Lumara Health Equity Incentive Plan and will not be available for future grant of awards under the 2019 Plan.

Vote Required

The affirmative vote of the holders of a majority of the shares of our common stock present or represented and voting at the Annual Meeting is required to approve the Executive Option Exchange Program.

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE STOCK OPTION EXCHANGE PROGRAM FOR CERTAIN EXECUTIVE EMPLOYEES.

PROPOSAL 4: ADVISORY VOTE ON EXECUTIVE COMPENSATION

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") and Section 14A of the Exchange Act, we are conducting a stockholder advisory vote on the compensation paid to our named executive officers. This proposal, commonly known as "say-on-pay," gives our stockholders the opportunity to express their views on our named executive officers' compensation. The vote is advisory, and, therefore, it is not binding on the Board, the Compensation Committee, or the Company. Nevertheless, the Compensation Committee will take into account the outcome of the vote when considering future executive compensation decisions. We currently intend to conduct this advisory vote annually.

As described in detail in the "*Compensation Discussion and Analysis*" section of this Proxy Statement, our executive compensation program is designed to attract, motivate and retain our named executive officers who are critical to our success. Our Board believes that our executive compensation program is well tailored to retain and motivate key executives while recognizing the need to align our executive compensation program with the interests of our stockholders and our "pay-for-performance" philosophy. We encourage our stockholders to read the "*Compensation Discussion and Analysis*" section as well as the "*Summary Compensation Table for the 2019, 2018 and 2017 Fiscal Years*" table below and other related compensation tables and narrative disclosures, which describe our executive compensation philosophy, programs, and practices and the 2019 compensation of our named executive officers.

We are asking our stockholders to indicate their support for the compensation of our named executive officers as described herein. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and our executive compensation philosophy, programs, and practices as described in this Proxy Statement.

Accordingly, we ask our stockholders to vote "FOR" the approval, on an advisory basis, of the compensation of our named executive officers, as described in this Proxy Statement.

Required Vote

Advisory approval of this proposal requires the affirmative vote of the holders of a majority of shares of common stock present or represented and voting at the Annual Meeting. The say-on-pay vote is advisory, and therefore not binding on our Board, the Compensation Committee or the Company. However, our Board and our Compensation Committee value the opinions of our stockholders, and to the extent there is a significant vote against the compensation of our named executive officers as disclosed in this Proxy Statement, we will consider our stockholders' concerns, and the Compensation Committee will evaluate whether any actions are necessary to address those concerns.

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE APPROVAL OF, ON AN ADVISORY BASIS, THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

EXECUTIVE OFFICERS AND COMPENSATION

Set forth below is a description of our current executive officers and of compensation received by our named executive officers for the year ended December 31, 2019.

EXECUTIVE OFFICERS

Please refer to "*Proposal 1: Election of Directors*" for Mr. Heiden's biography.

Edward Myles, age 48, our Executive Vice President, Chief Financial Officer, Chief Operating Officer and Treasurer, joined us as Senior Vice President of Finance, Chief Financial Officer and Treasurer in April 2016. Prior to joining us, Mr. Myles served in various positions, including President at Ocata Therapeutics, Inc. ("Ocata"), a public biotechnology company, from 2013 to April 2016, most recently as Chief Financial Officer and Chief Operating Officer. During his tenure at Ocata he led the turnaround of the company, which ultimately resulted in its acquisition by Astellas Pharma Inc. in February 2016. Prior to Ocata, Mr. Myles served as Chief Financial Officer and Vice President of Operations at PrimeraDx, Inc., a molecular diagnostics company, from 2008 to 2013. He also served as Senior Vice President of Finance and Chief Financial Officer at Pressure Biosciences, Inc. from 2006 to 2008 and Controller at EMD Pharmaceuticals, Inc. (a wholly-owned subsidiary of Merck KGaA) from 2003 to 2006. Earlier in his career, Mr. Myles was an Associate in the healthcare investment banking group at SG Cowen Securities Corporation and served as Corporate Controller for Boston Biomedica, Inc., a public diagnostic and life science tools company. Mr. Myles began his career at PricewaterhouseCoopers LLP where he served a variety of clients in the life sciences industry. Mr. Myles serves on the board of directors of Scholar Rock Holding Corporation, a biotechnology company, where he is the chair of the Audit Committee and a member of the Compensation Committee. Mr. Myles holds a B.S. in business administration from University of Hartford and an M.B.A. from the John M. Olin School of Business, Washington University.

Anthony Casciano, age 43, our Executive Vice President and Chief Commercial Officer, joined us as Senior Vice President of Sales and Marketing for the Company's Hematology and Oncology business in September 2016. Prior to joining us, Mr. Casciano served for 16 years in positions of increasing responsibility at Sanofi US from 2000 to September 2016, where he most recently served as the head of marketing and led the General Medicine division. Mr. Casciano holds a B.S. in Exercise Physiology from Bridgewater State College.

Kelly Schick, age 40, our Senior Vice President and Chief Human Resources Officer, joined us as Executive Director, Human Resources in September 2016. Prior to AMAG, Ms. Schick served as head of global talent for Bristol-Myers Squibb (BMS) where she had responsibility for global talent management, talent acquisition, learning and development, organization effectiveness and diversity and inclusion for the company's global manufacturing division from January 2011 to September 2016. Before joining BMS in 2011, Ms. Schick held a series of HR business partner roles of increasing responsibility supporting the research and development organization for Merck and Company, Inc. Ms. Schick holds a Bachelor of Arts in psychology from Boston University and a Master of Arts in human resources and labor relations from the Curtis L. Carlson School of Management at the University of Minnesota.

Joseph D. Vittiglio, age 49, our Executive Vice President, Chief Business Officer and General Counsel & Corporate Secretary, joined us in August 2015 as our Senior Vice President, Legal Affairs, General Counsel and Secretary. Prior to joining us, Mr. Vittiglio served from March 2015 to August 2015 as Vice President of Legal Affairs and a member of the Management Committee at Flexion Therapeutics, Inc. ("Flexion"), a public pharmaceutical company. Prior to Flexion, Mr. Vittiglio was the General Counsel and Secretary of AVEO Pharmaceuticals, Inc., a public biopharmaceutical company, from 2007 to March 2015. From 2005 to 2007, he served as Director of Corporate Legal Affairs at Oscient Pharmaceuticals Corporation ("Oscient"), a public pharmaceutical company. Prior to Oscient,

Mr. Vittiglio was a senior corporate associate from 1998 to 2005 at Mintz, Levin, Cohn, Ferris, Glovsky and Popeo PC. Mr. Vittiglio holds a B.A. in International Relations from Tufts University and a J.D. from Northeastern University School of Law.

COMPENSATION DISCUSSION AND ANALYSIS

Executive Summary

Overview

Our Compensation Committee believes that our executive compensation program is appropriately designed and balanced as it both encourages our executive officers to work for our long-term prosperity and reflects a pay-for-performance philosophy, without encouraging our employees to assume excessive risks.

2019 Advisory Vote on Executive Compensation

At our 2019 annual meeting of stockholders, we held our eighth advisory vote on executive compensation. Approximately 90% of the votes cast on the proposal were in favor of our named executive officer compensation as disclosed in our proxy statement for the 2019 meeting, consistent with the results of our say-on-pay vote in 2018. Our Compensation Committee reviewed the final 2019 say-on-pay vote results and determined that, given the significant level of support and the Compensation Committee's overall satisfaction with the program, no material changes to our executive compensation policies and programs were necessary at that time. We are again holding an advisory vote to approve executive compensation at our 2020 annual meeting of stockholders.

Executive Compensation Philosophy and Objectives

Our executive compensation program has consistently and meaningfully been focused on pay-for-performance principles, and has included payouts above or below target under our annual incentive plan when the Company's performance was above or below expectations. Our key executive compensation objectives are to attract and retain the highest quality executive talent, motivate executives by aligning their short- and long-term interests with those of our stockholders, and reward short- and long-term individual and Company performance. We use the following principles to guide our decisions regarding executive compensation:

Objectives

The following is a summary of our overall executive compensation philosophy, as approved by our Compensation Committee and our Board:

Pay-for-Performance. Total compensation should reflect a "pay-for-performance" philosophy such that a substantial portion of executive compensation should include short- and long-term incentive awards that are tied to the achievement of the short- and long-term performance objectives of both the Company and the individual without encouraging excessive risk.

Alignment with Stockholders' Interests. Total compensation levels should include a component that reflects stockholder returns and the Company's overall performance through the use of equity-based awards.

External Competitiveness. We strive to ensure that our executives' total compensation levels are competitive with peer companies so that we can attract and retain high performing key executive talent.

To ensure that our executives' total compensation levels are competitive, our Compensation Committee, in consultation with its independent advisors and our senior management, periodically

reviews the compensation policies and practices of other companies in our peer group and the composition of our peer group, which includes commercial stage biopharmaceutical companies with similar business models, industry, complexity, market capitalization, annual revenue and employee headcount.

Internal Parity. To the extent practicable, base salary levels and short- and long-term incentive target levels for similarly-situated executives within the Company should be comparable to avoid divisiveness and encourage teamwork, collaboration, and a cooperative working environment.

Simplicity and Flexibility. Our executive compensation program should be straightforward and easy to understand for both our employees and stockholders. The compensation program should also be sufficiently flexible to be able to adapt to rapid changes in the competitive environment for executives in the biotechnology and pharmaceuticals sectors.

Avoidance of Excessive Perquisites. Although we will consider certain perquisites that are common and appropriate for similarly-situated executives of public companies, as a general matter, we intend to avoid the payment of excessive, unusual, or unnecessary perquisites to executives.

Key Features of Our Compensation Program

Our compensation program is administered under a rigorous process which includes the solicitation by the Compensation Committee of advice of an independent third-party consultant and long-standing, consistently applied practices with respect to the timing of equity grants, the pricing of stock options and the periodic review of peer group practices.

Our Policies and Practices	
Pay for performance	A significant portion of our executive officers' compensation is variable or "at risk." For example, the annual bonus amount for each named executive officer is based on the achievement of pre-established company strategic and financial goals and, with the exception of our Chief Executive Officer, individual performance.
Focus on Long-Term Performance	The actual economic value of the long-term incentives granted to our executive officers in the form of equity awards, which vest over three or four years, depends on the performance of our stock price over the period during which the awards vest and could be as little as zero with respect to stock options if our stock price is less than the exercise price of such stock options at the time of vesting or, in the case of PSUs, if our stock price appreciation underperforms the NASDAQ Biotechnology Index. For example, the vesting criteria of the 2017 PSUs resulted in no shares being ultimately issued to the executives as a result of the performance of our stock price as compared to the Index.
Cap on Bonus Payouts	No bonus awards will be issued in excess of 200% of the executive's target bonus.

Our Policies and Practices	
Change in Control Double Trigger	Neither cash benefits nor acceleration of time-based equity awards are automatically provided to our executive officers in the event of a change of control of the Company unless either the acquirer does not assume the equity awards or there is also a termination of service (or the executive officer resigns for good reason) within one year from the date a change of control of the Company occurs.
Independent Compensation Consultant	We engage an independent advisor, which reports directly to the Compensation Committee.
Stock Ownership Guidelines	To align the interests of our executive officers with our stockholders, we maintain stock ownership guidelines (three times salary for our Chief Executive Officer and one times salary for all other executives).
Clawback Policy	We maintain a clawback policy that allows us to recover cash and equity-based incentive compensation from certain officers in the event we are required to prepare an accounting restatement due to material noncompliance with financial statement requirements.
No Hedging or Pledging	Our Insider Trading Policy prohibits directors, officers and other employees from selling short, buying or selling puts or calls, purchasing on margin and pledging or creating any other encumbrance with respect to our securities.
No Repricing	We will not re-price our stock options or issue them with below-market exercise prices without stockholder approval. For example, we are seeking stockholder approval for two option exchange programs in this year's proxy, which we believe will provide a more cost-effective retention and incentive tool to our employees rather than issuing incremental equity or paying additional cash compensation. If we do not receive stockholder approval, then the programs will not proceed.
No Excise Tax Gross-ups on Change in Control Benefits	We do not provide any tax gross-up benefits for excise taxes associated with change in control compensation.
No Guaranteed Bonuses or Salary Increases	We do not provide our executive officers with guarantees for annual salary increases or non-performance-based guaranteed bonuses or equity compensation.
No Share Recycling or Evergreen Provisions	Our 2019 Equity Plan prohibits share recycling and does not contain an evergreen renewal provision.
No Excessive Perquisites	Our named executive officers receive only limited perquisites.
No Post-Termination Retirement or Pension Benefits	We do not provide any post termination retirement benefits, such as defined benefit pension plans to our employees.

Executive Compensation Decisions and Processes

General

The Compensation Committee typically meets at least four times per year, with additional meetings planned as necessary. The Compensation Committee met seven times during 2019. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in close consultation, as appropriate, with our President and Chief Executive Officer, Chief Human Resources Officer, General Counsel, and other executives who may have input on a given agenda item. From time to time, various members of management as well as outside advisors and consultants may be invited to make presentations, to provide background information or advice, or to otherwise participate in a given meeting; however, the Compensation Committee meets regularly in executive session. Our Chief Executive Officer is often present and actively participates in discussions and deliberations regarding the compensation of our executive officers. However, our Chief Executive Officer is not present during deliberations regarding his own performance and compensation.

Establishing Annual Performance Goals

At the beginning of each year, the Board agrees upon a defined list of goals against which it will evaluate the Company's performance at the end of the year for purposes of making executive compensation decisions, based upon the recommendation of the Compensation Committee. The Compensation Committee develops these goals in consultation with senior management, and endeavors to make the goals consistent with the Company's financial budget and strategic plan for the year, with the expectation that the Company will achieve its baseline goals for the year and that scoring of the goals at the end of the year will likely yield a bonus payout at or about the target amount. The weight given to the various Company goals is based on the Compensation Committee's and the Board's subjective determination of the Company's relative strategic and operating priorities for the upcoming fiscal year. Whenever possible, the Compensation Committee attempts to develop quantitative measures of performance to provide clarity throughout the year as to how the Company is progressing against its goals.

In addition, our Chief Executive Officer works with each executive officer to establish his or her individual annual performance goals and objectives. Individual executive performance goals are not established or scored based on a mathematical calculation (other than our Chief Executive Officer whose bonus is determined by the Company's performance score), in contrast to the manner in which the overall Company performance goals are established and scored. Rather, individual executive performance goals are established in a manner that allows for more qualitative and subjective assessment.

Annual Executive Compensation Decision-Making Processes

The Compensation Committee conducts an annual review of the performance and compensation of each of our executive officers, including our Chief Executive Officer. This review is typically conducted over a series of Compensation Committee meetings toward the end and just after the end of the completed fiscal year, and is intended to coincide with the Company's annual Company-wide performance review process.

Our Chief Executive Officer and certain members of senior management report to the Compensation Committee and the Board on the Company's overall performance on a regular basis throughout the year. At the end of the year, our Chief Executive Officer and certain members of the senior management team present the Compensation Committee with a proposed score based on the Company's actual performance as calculated against the corporate performance goals and targets established by the Compensation Committee and the Board at the outset of the year. Because the Company's overall performance goals allow for some amount of subjective and qualitative assessment,

there are typically a series of meetings and discussions among senior management, the Compensation Committee and the Board as to the exact and appropriate scoring of the Company's performance against the goals established by the Board at the outset of the year. At the conclusion of the foregoing discussions, the Compensation Committee exercises its discretion to determine a final Company performance score for the completed fiscal year.

The Company's overall performance score is used to determine the size of the Company-wide bonus pool. In addition, the Company's annual performance score determines the annual bonus for our Chief Executive Officer. Given that our Chief Executive Officer has ultimate operational responsibility for the overall performance of the Company, the Compensation Committee and the Board believe that his individual annual performance goals and the Company's overall annual performance goals should be the same and, therefore, determined that his bonus shall be entirely based on the Company's overall performance score.

For our other named executive officers, our Chief Executive Officer evaluates the executive officer's overall achievement of his or her performance throughout the year as well as his or her contributions to the Company's corporate goals and recommends a bonus amount based on the executive's target bonus, for each executive officer to the Compensation Committee. The Compensation Committee reviews the recommendations of the Chief Executive Officer and each individual executive's contribution and performance goals, and applies an individual modifier to the corporate score of plus or minus up to 20% depending on such executive officer's performance during the applicable year. In addition, the Company has a policy that provides that no bonus awards will be issued in excess of 200% of the executive's target bonus. The Compensation Committee believes that our Chief Executive Officer is in the best position to evaluate the performance of the executives, other than himself, and the Compensation Committee believes that substantial deference to our Chief Executive Officer's evaluation of such executives and his related recommendations is generally appropriate. With respect to our Chief Executive Officer, he generally reports to the Compensation Committee and the Board on his performance for the completed fiscal year and they provide him feedback regarding that performance. The Compensation Committee generally considers all of the foregoing and makes a determination as to the appropriate level of his base salary, bonus and equity awards.

Generally, at or around the time the Compensation Committee reviews and approves the bonus amount for the executives for the completed fiscal year, it also reviews the salary level of each executive and determines the amount of the annual equity grant to each executive for the then current fiscal year. In accordance with our executive compensation philosophy, the Compensation Committee seeks to ensure that each executive's salary and the value of the annual equity grant to each executive are competitive with that of similarly situated executives, to the extent such comparable positions exist.

Independent Compensation Consultants

Under its charter, the Compensation Committee is authorized to engage such independent advisors as it deems necessary or appropriate to carry out its responsibilities. The Compensation Committee conducts a thorough independent review of the Company's overall executive compensation practices relative to its peer group, as well as the composition of the peer group itself, as frequently as every year, or as needed. Consistent with past practice, in September 2018 the Compensation Committee retained the Rewards Solution practice at Aon, specifically members of their Radford advisory team, to perform an executive compensation review for fiscal year 2019 and to provide ad hoc general compensation consulting and advisory services to the Compensation Committee during 2019, including, but not limited to, executive and equity compensation and incentive design. The Compensation Committee has assessed the independence of Radford pursuant to NASDAQ and SEC rules, including evaluating whether other services will be provided by Radford to the Company, the amount of the fees anticipated to be received by Radford, and Radford's policies and procedures designed to prevent conflicts of interest. Based on this evaluation, the Compensation Committee concluded that no conflict of interest exists that would prevent Radford from serving as an independent consultant to the Compensation Committee.

Beginning in late 2018, Radford initiated discussions with the Compensation Committee comparing the overall compensation then provided by the Company to each of our executive officers, including annual salary, annual bonus opportunity, and annual equity grants against publicly available compensation information from 15 peer companies, described below, identified in consultation with senior management and the Compensation Committee (the "Radford Report"). The peer group is comprised of commercial companies operating in the biotechnology and pharmaceutical industries, which were selected primarily on the basis of the number of employees, revenues and market capitalization. In addition to publicly available proxy data from the selected peer group companies, Radford utilized its own proprietary market compensation data for the industry.

With input from senior management, the Compensation Committee discussed, reviewed and approved the following criteria, which Radford then used to develop a proposed updated peer group for purposes of the Compensation Committee's evaluation of our 2019 executive compensation practices:

- 15 publicly-traded U.S. companies to ensure a meaningful market sample;
- Biotechnology and pharmaceutical companies with revenue targeted from \$150 million to \$1.5 billion;
- Employee headcount targeted from 200 to 1,800; and
- Market capitalization targeted from \$250 million to \$2.5 billion.

Radford solicited input from senior management before making its final recommendation regarding the Company's peer group to the Compensation Committee. After review and discussion with Radford, the Compensation Committee accepted the recommendations proposed by Radford with respect to our compensation peer group. Accordingly, the Compensation Committee conducted its 2019 executive compensation review utilizing the following peer group:

Peer Group	
• Acorda Therapeutics, Inc.	• Insys Therapeutics
• Akorn, Inc.*	• Ionis Pharmaceuticals
• Amphastar Pharmaceuticals, Inc.*	• Ironwood Pharmaceuticals, Inc.
• Assertio Therapeutics, Inc. (formerly Depomed)*	• Pacira Pharmaceuticals, Inc.
• Eagle Pharmaceuticals, Inc.*	• Radius Health, Inc. *
• Emergent BioSolutions	• Spectrum Pharmaceuticals, Inc.
• Halozyme Therapeutics, Inc.*	• Supernus Pharmaceuticals, Inc
• Horizon Pharma	

* New addition to our peer group for purposes of determining 2019 executive compensation based on the Company's evolving parameters.

In addition to the companies added to our peer group noted above, Nektar Therapeutics, Inc., The Medicines Company, TherapeuticsMD and Vanda Pharmaceuticals, Inc. were removed from our peer group for purposes of determining 2019 executive compensation based primarily on the differences in our market value, revenues or stage of development. Ariad Pharmaceuticals, Inc. and Sucampo Pharmaceuticals, Inc. were also removed from our peer group because they were acquired by another company.

The Radford Report confirmed that our then existing executive compensation practices were generally in line with our overall executive compensation philosophy. In particular, the Radford Report confirmed that we had been adhering to our philosophy that total executive compensation should be more heavily weighted toward long-term incentive compensation to ensure that the interests of our

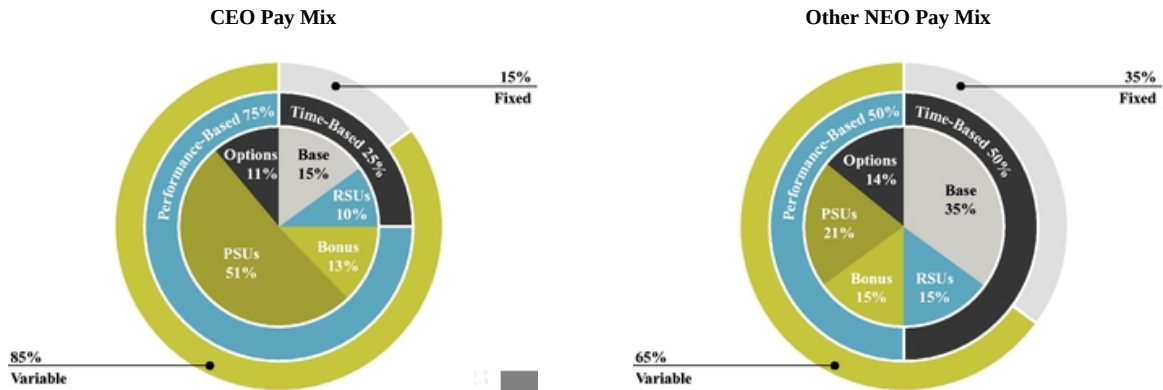
executives are aligned with those of our stockholders and that the proportion of total compensation at risk should rise as an executive's level of responsibility increases.

Elements of Our Executive Compensation Program

Consistent with our executive compensation objectives, we have developed an executive compensation program consisting of base salary, short-term incentives in the form of annual cash bonus opportunities, long-term incentives in the form of equity-based awards (stock options, RSUs and PSUs), and benefits. To further our guiding compensation principles, the relative mix of the short- and long-term components of total potential compensation for the Chief Executive Officer should be weighted more toward performance-based compensation, and for our other NEO's, towards an equal balance of performance-based and time-based compensation. In addition, in 2019, in order to ensure that we were able to retain members of the executive team in order to execute on various critical corporate goals and navigate through challenges that we expected to encounter over the course of the next several months, our Compensation Committee implemented a retention program for certain members of the management team, as discussed in more detail below.

The value of such variable compensation is generally weighted more heavily toward long- than short-term incentives to ensure the interests of the executives are more closely aligned with those of our stockholders. The Compensation Committee strives to maintain an appropriate balance between short- and long-term incentive awards and alignment between our executives' compensation and our Company's performance. In particular, the Compensation Committee believes it is important that a majority of our Chief Executive Officer's total target compensation be tied to the performance of our stock relative to our peers and therefore in 2019, Mr. Heiden's performance-based compensation amounted to 75% of his total 2019 compensation and his PSU awards made up 51% of his total 2019 compensation.

Provided below is a summary of the actual 2019 Pay Mix for the CEO and our other NEO's:



Components of Our Executive Compensation Program

Component	Purpose	Key Features
Base Salary	Provides fixed annual cash compensation that is competitive with base salary levels provided to executives in similar positions, responsibility, experience, qualifications, and performance among our peers.	<ul style="list-style-type: none"> • Fixed cash compensation • Reviewed annually and adjusted as appropriate • Provides predictability to executives • Allows us to recruit and retain the best qualified executives
Short-Term Incentives	Motivates executives to achieve both the Company's annual operating goals and the individual's annual performance objectives.	<ul style="list-style-type: none"> • Variable cash compensation • Amount of annual bonus is based on the achievement of pre-established company performance goals with an individual modifier of plus or minus up to 20% depending on such executive officer's performance during the applicable year (for our Chief Executive Officer, the annual bonus is based solely on the level of achievement of the corporate goals) • No amount is guaranteed • Determined annually • Annual equity-based awards
Long-Term Incentives	Aligns the interests of executives with those of our stockholders and provides executives with a continuing ownership stake in our long-term success through a mix of options, RSUs, and PSUs.	<ul style="list-style-type: none"> • Promotes retention (three to four-year vesting periods) • Options provide value only if there is future stock appreciation • Number of PSU shares earned is determined based on TSR of our common stock relative to TSR of common stock of companies on the NASDAQ biotechnology index
Health and Life Insurance and Other Employee Benefits	Competitive to that offered by companies similar to us to ensure that we do not lose talented candidates or employees as a result of an inferior benefits package.	<ul style="list-style-type: none"> • Overall benefits package, including health and life insurance, and a fully vested 401(k) contribution

2019 Base Salary

Base salaries of executives are reviewed annually as part of our annual review process in light of the executive's individual performance and the Company's performance during the year as well as the then current competitive conditions. We believe that it is appropriate during most years to provide an upward adjustment to executive salaries if the executive's performance warrants such adjustment, our financial condition permits, and/or in order to adhere to our executive compensation philosophy of maintaining base salary levels near the 50th percentile as compared to our peers. The Radford Report (described above under "*Independent Compensation Consultants*") noted that for 2019, the base salaries for our named executive officers in the aggregate fell at approximately the 50th percentile and the base salary for Mr. Heiden fell at approximately the 38th percentile, as compared to Radford's market compensation data. As such, based on the Radford Report, in February 2019 the Compensation Committee approved merit increases of approximately 4.0% for Mr. Heiden, 3.0% for each of Mr. Myles and Dr. Krop, 5.5% for Mr. Casciano and 10.0% for Mr. Vittiglio in order to maintain or align the base salaries of our named executive officers with the 50th percentile. Accordingly, the base salaries, on an annualized basis, of our named executive officers were increased, effective March 2019, as follows:

Name	2018 Base Salary (\$)	2019 Base Salary (\$)
William K. Heiden	766,500	797,200
Edward Myles	444,100	457,400
Anthony Casciano	400,000	422,000
Julie Krop, M.D.	457,600	471,300
Joseph Vittiglio	418,000	459,800

2019 Annual Cash Bonus

Achievement of Overall Company Performance Goals

The target amount for the annual bonus opportunity is generally established at the outset of the fiscal year or in the executive officer's employment agreement and is generally based on a percentage of the executive's base salary that is intended to be competitive with that offered to similarly-situated executives, to the extent such comparable positions exist. As described above under "*Annual Executive Compensation Decision-Making Processes*," with the exception of Mr. Heiden, under the current executive annual performance bonus plan, the amount of each named executive officer's annual bonus is based on pre-established company performance goals with an individual modifier of plus or minus up to 20% depending on such executive officer's performance during the applicable year.

Based on the achievement of the pre-established performance goals, each executive's, including Mr. Heiden's, annual bonus could range between 200% and 0% of his or her target annual bonus. Our annual bonus program does not have a threshold performance level required to receive an annual bonus.

In accordance with the process detailed above under "*Establishing Annual Performance Goals*," and based on the recommendation of the Compensation Committee after consultation with senior management, in early 2019 the Board established the Company's 2019 performance goals. In early

2020, the Compensation Committee scored the 2019 goals and awarded the Company 70 out of 100 points based on the following conclusions:

Corporate Goal	Weight	Result	Award Value
Financial —(i) net revenue at or above \$390 million, and (ii) Intrarosa net revenues at or above \$65 million.		(i) Actual revenue equaled \$327 million due, in part, to supply disruption of Makena IM product, and, accordingly, minimal credit awarded, and (ii) no points awarded for the Intrarosa goal (did not achieve goal).	3
Balance Sheet —balance sheet liquidity.		Achieved minimum cash balance goal (ended year with over \$170 million) and prepared for liability management	
	10%	in 2020	10
Product Development —(i) FDA approval of Vyleesi, (ii) progress on AMAG-423 and Cirapranag programs and (iii) further patent portfolio of key products		Secured Vyleesi NDA approval and furthered program IP; furthered development programs but did not receive full credit due to slower than forecasted enrollment for AMAG 423 study and Ciraparantag phase 2B study.	37
Business Development —consummate out-license transaction/partnership.		Received only partial credit as progress was made with potential development program partners but no transaction was consummated.	5
Organizational Development —Focus on development of effective risk management, key leadership and growth in new areas such as drug development.		Successfully integrated two development programs, including continued expansion of development infrastructure/personnel; good progress on organizational and operational effectiveness. Strong progress on improved supply chain inventory risk management.	15
Total	100%		70

Actual 2019 Annual Cash Bonus

As discussed above, Mr. Heiden's individual annual performance goals are the same as the Company's overall performance goals. Accordingly, Mr. Heiden's 2019 performance score was 70% during 2019 and therefore the Compensation Committee awarded Mr. Heiden 70% of his target bonus amount. Based on the above scoring of the Company's 2019 goals at 70% and as modified by the individual performance results of each named executive officer, other than Mr. Heiden, the

Compensation Committee approved a 2019 performance bonus to each of the named executive officers as follows:

Name	2019 Target Bonus (as a % of Base Salary)(1)	2019 Target Bonus (\$)	2019 Target Bonus Adjusted for 70% Achievement of Company Goals (\$)	2019 Individual Modifier Percentage	2019 Target Bonus Percentage Awarded	2019 Actual Annual Bonus (\$)
William K. Heiden	85%	677,620	474,334	100%	70%	474,311
Edward Myles(2)	45%	205,830	144,081	110%	77%	158,507
Anthony Casciano(3)	45%	189,900	132,930	110%	77%	146,223
Julie Krop, M.D.(4)	45%	212,085	148,460	100%	70%	148,469
Joseph Vittiglio(5)	45%	206,910	144,837	110%	77%	159,321

- (1) In February 2019, the Compensation Committee, in connection with its overall compensation review of our named executive officers and based on the recommendation of Radford, determined the 2019 target bonus as a percentage of base salary for each of our named executive officers. The target bonus as a percentage of salary for each of our named executive officers remained the same in 2019 as 2018.
- (2) Mr. Myles' individual achievements included strong oversight and management of our finance, accounting and technology departments, and managing our operating expenses to achieve the original 2019 adjusted-EBITDA goals in spite of lower revenues due to Makena.
- (3) Mr. Casciano's individual achievements included implementing a move to a more efficient women's health sales force, navigating several challenges with Makena, and strong leadership of commercial teams with revenue growth on Feraheme.
- (4) Dr. Krop's individual achievements included progressing key development programs, including achieving FDA approval for Vyleesi.
- (5) Mr. Vittiglio's individual achievements included strong leadership of the legal and quality groups, including negotiating the settlement of the Daiichi Sankyo contract dispute.

2019 Annual Equity Awards

The Compensation Committee and the Board believe that the amount of a new hire and an annual equity-based award should be competitive to that offered to similarly-situated executives, to the extent such comparable positions exist, and total executive compensation should be more heavily weighted toward long-term incentive compensation to ensure that the interests of our executives are aligned with those of our stockholders. In addition, the Compensation Committee and the Board believe that the proportion of total at-risk compensation should rise as an executive's level of responsibility increases because of the executive's increased ability to influence overall Company performance.

The Company's philosophy is to award a portion of each executive's total annual equity grant to executives in the form of a mix of stock options, RSUs and PSUs, with the total value of the annual equity awards at or above the 50th percentile relative to similarly situated executives in our peer group and with the allocation percentage of equity mix also in line with our peer group. Accordingly, based upon recommendations contained in the Radford Report and recommendations by Mr. Heiden (with respect to the executive officers other than Mr. Heiden), in February 2019, the Compensation Committee awarded our executive officers with a time-based stock option grant, a time-based RSU grant and a PSU grant (detailed below), which when combined, and valuing the RSUs and PSUs at a

ratio of approximately one to 2.3 as compared to stock options, provided the executive officers an award at approximately the 50th percentile as compared to Radford's market compensation data.

Time Based Stock Options

In February 2019, stock options to purchase the following number of shares of our common stock were granted pursuant to our 2007 Equity Incentive Plan at an exercise price of \$15.57, which was the fair market value of a share of our common stock on the date of grant. These options have a ten-year term and vest over four years after the grant date as follows: (a) 25% on the first anniversary of the grant date and (b) equal quarterly installments over the next three years thereafter.

Name	Number of Shares
William K. Heiden	70,000
Edward Myles	25,000
Anthony Casciano	16,156
Julie Krop, M.D.	25,000
Joseph Vittiglio	25,000

Time Based Restricted Stock Units

In February 2019, RSU grants covering the following number of shares of our common stock were awarded pursuant to our 2007 Equity Incentive Plan. These RSUs vest in equal installments over a three-year period beginning on the first anniversary of the grant date.

Name	Number of Shares
William K. Heiden	31,000
Edward Myles	12,000
Anthony Casciano	7,621
Julie Krop, M.D.	10,000
Joseph Vittiglio	20,000

Performance-Based Equity Awards

In 2017, the Company introduced a Performance Share Unit program for the CEO and other senior executives to reinforce the strong linkage of executive pay to company performance and long-term shareholder value. The CEO and other senior executives received approximately one-third of their 2017 annual equity awards as PSUs and were eligible to earn a specified number of shares relative to target at the end of the three-year period based on the performance of our stock relative to our peers.

Performance and Payouts under the 2017 PSU Award Cycle

For the PSUs awarded in 2017 (the "2017 PSU Awards"), payouts were determined based on the Company's relative TSR ranking versus the Nasdaq Biotechnology Index for the performance period from February 23, 2017 to February 22, 2020, as follows:

Relative TSR Performance	Vesting Percentage
75 th Percentile or above	150%
50 th Percentile	100%
25 th Percentile	50%
Below 25 th Percentile	0%

At its March 2020 meeting, the Compensation Committee determined that the Company's TSR ranking for the 2017 PSU Awards was –60%, which resulted in a placement at the 22nd percentile relative to the Nasdaq Biotechnology Index and thus confirmed a 0% payout for 2017 PSU Awards for the CEO and other executives. The following table sets forth TSR outcomes versus Nasdaq Biotechnology Index for the 2017 PSU Awards:

Percentile	TSR
75 th Percentile	69.19%
50 th Percentile	2.54%
25 th Percentile	–53.30%
22nd Percentile (AMAG)	–60.00%

Furthermore, the following table sets forth the final distribution for the 2017 PSU Awards for each Named Executive Officer:

Named Executive Officer	Target Award (# of shares)	Final Award (# of shares)
William K. Heiden	55,000	0
Edward Myles	7,500	0
Anthony Casciano	4,000	0
Julie Krop, M.D.	7,500	0
Joseph Vittiglio	7,500	0

2019 Performance Stock Unit Awards

In February 2019, PSU grants covering the following number of shares of our common stock were awarded under our 2007 Equity Incentive Plan and pursuant to the LTIP. The number of PSU shares earned under these awards is determined based on the TSR of our common stock relative to the TSR of the constituents of the NASDAQ Biotechnology Index (the "PSU Peer Group") as of the beginning of the performance period from February 25, 2019 to February 24, 2022. The number of shares included in the table below represents the target shares awarded in 2019; however, the final shares awarded can range from zero to 150% of the target award amount based on our final TSR relative to our PSU Peer Group as follows:

Name	Number of Shares
William K. Heiden	132,000
Edward Myles	20,000
Anthony Casciano	7,621
Julie Krop, M.D.	15,000
Joseph Vittiglio	12,000

Index Relative TSR Return	Percentage of Target Award Earned
Below 25 th Percentile	Below Threshold (0%)
25 th Percentile	Threshold (50%)
50 th Percentile	Target (100%)
75 th Percentile	Maximum (150%)

Additional Equity Awards for Mr. Casciano

On April 4, 2019 in connection with Mr. Casciano's promotion to Chief Commercial Officer, in March 2019, he was granted stock options to purchase 25,000 shares of our common stock pursuant to our 2007 Equity Incentive Plan at an exercise price of \$13.03, which was the fair market value of a share of our common stock on the date of grant. These options have a ten-year term and vest over four years after the grant date as follows: (a) 25% on the first anniversary of the grant date and (b) equal quarterly installments over the next three years thereafter. In addition, in connection with his promotion, Mr. Casciano was awarded RSU grants covering 15,000 shares of our common stock pursuant to our 2007 Equity Incentive Plan, which vests in three equal annual installments over a three-year period beginning on the first anniversary of the grant date.

Executive Retention

In 2019, the Compensation Committee recognized the need to incentivize and encourage key executives to remain employed with the Company to execute on various critical corporate goals, particularly in light of certain corporate challenges, including the recent activist campaign. As such, in October 2019, the Compensation Committee granted each of our named executive officers, other than Mr. Heiden, a \$200,000 cash retention award, with 25% payable if such individual is employed by the Company on November 30, 2019, 50% payable if such individual is employed by the Company on July 31, 2020 (the "Original July 2020 Payment") and the remaining 25% payable if such individual is employed by the Company on January 31, 2021 (the "Original 2021 Payment").

In January 2020, in order to retain and further incentivize our management team, including to manage the results of the recommendation of the Advisory Committee regarding Makena and the sale of our women's health business, the Compensation Committee modified the awards such that each of the named executive officers set forth below would receive the amounts set forth opposite their name if such individual is employed by the Company on the respective dates set forth below, in lieu of the Original July 2020 Payment and the Original January 2021 Payment.

Name	July 31 2020 (the "Revised July 2020 Payment)	January 31, 2021 (the "Revised January 2021 Payment)	July 31, 2021
Anthony Casciano	\$ 150,000	\$ 315,000	\$ 165,000
Joseph Vittiglio	\$ 150,000	\$ 260,000	\$ 110,000
Edward Myles	\$ 150,000	\$ 315,000	\$ 165,000

In the event that an executive's employment is terminated without cause or he or she resigns for good reason, the executive will be entitled to the next installment of the retention bonus that would have been earned if his or her employment were not terminated; provided however, such executive shall be entitled to his or her Revised July 2020 Payment and his or her Revised January 2021 Payment if he or she is terminated without cause or resigns for good reason prior to July 31, 2020. In exchange for Dr. Krop's agreeing to provide support and transition services through March 31, 2020 as part of her separation, we agreed to provide Dr. Krop with a lump-sum payment of \$288,000, subject to certain conditions and in lieu of further payout of her retention award.

2020 Executive Transitions

In January 2020, we announced that Mr. Heiden plans to step down as our President and Chief Executive Officer, but intends to remain in his roles until the earlier of such time as his successor is appointed and June 30, 2020 (the earlier of which, the "Separation Date"). Following the Separation Date, and subject to certain conditions, including our receipt of an effective release and waiver of claims from Mr. Heiden, Mr. Heiden will be entitled to 24 months of salary continuation, as well as

accelerated vesting on all time-based stock options and other time-based equity awards to the extent such awards would have vested had he been employed for an additional 24 months following the Separation Date, in each case as provided in his employment agreement. Mr. Heiden will also be entitled to a pro-rated bonus for the 2020 fiscal year (to be paid in 2021 based on actual performance at such time as 2020 bonuses are distributed to employees), the ability to exercise any outstanding stock options for a period of 180 days following the Separation Date, an amount equal to what we would have paid to provide the executive with similar health coverage for an active employee for up to 12 months subject to certain conditions and reimbursed legal expenses in connection with the separation.

In addition to the announced transition of Mr. Heiden, in January 2020 we also announced that Mr. Myles was assuming the additional role of Chief Operating Officer, expanding his responsibilities to include technical operations, global supply chain and quality, and that Mr. Vittiglio was assuming the additional role of Chief Business Officer, focusing on managing the divestiture of Intrarosa and Vyleesi and out-licensing opportunities in ex-U.S. territories, primarily for our development-stage programs.

Dr. Krop's last day of employment was March 31, 2020. As noted above, in exchange for her agreeing to provide support and transition services through her departure date, we paid her a lump-sum payment of \$288,000, subject to her execution of a release and waiver of claims, and she is not entitled to any other severance or retention payments.

Additional Compensation Information

Compensation Recoupment/Clawback

We have adopted a Policy for Recoupment of Incentive Compensation so that if the Company is required to prepare an accounting restatement due to our material non-compliance with any financial reporting requirements, then a committee of independent directors may require certain officers, including our named executive officers, to repay or forfeit any "excess compensation." "Excess compensation" refers to the portion of cash and equity-based incentive compensation received by a covered officer on or after the date the policy was adopted during the three-year period preceding the publication of the restated financial statements that the independent director committee determines was in excess of the amount that such officer would have received had such incentive compensation been determined based on the financial results reported in the restated financial statements. The policy also provides that the independent director committee may take into account any factors it deems reasonable in determining (1) whether to seek recoupment of previously paid excess compensation and (2) if so, how much excess compensation to recoup from the covered officer. Recouped amounts need not be the same amount or proportion for every covered officer and may reflect whether the committee concluded that a covered officer engaged in wrongdoing or committed grossly negligent acts or omissions.

Executive Stock Ownership Guidelines

The Board believes that it is important that our executives be incentivized to focus on long-term stockholder value to ensure that the executives' interests are aligned with those of our stockholders. Accordingly, the Board has adopted stock ownership guidelines to further align the interests of our executives with the interests of our stockholders and to promote our commitment to sound corporate governance.

Our stock ownership guidelines require all employees with a title of Senior Vice President or higher (each a "Covered Officer"), other than the Chief Executive Officer, to hold shares of our common stock with a value equal to one times the amount of his or her then-current annual base salary. Our Chief Executive Officer is required to hold shares of our common stock with a value equal to three times the amount of his or her then-current annual base salary. These ownership guidelines

are calculated annually on the date of the annual meeting of stockholders based on the applicable annual base salary in effect on such calculation date. The value of a share will be measured on the date of our annual meeting of stockholders each year based on the average closing price over the 30 calendar days preceding the date of calculation. Such calculated ownership levels will be reported to the Governance and Risk Committee.

Covered Officers are required to achieve the applicable level of ownership within five years of the later of the date the guidelines were adopted and the date the person first became a Covered Officer. In the event that a Covered Officer does not meet the foregoing stock ownership guidelines, such Covered Officer is prohibited from selling any stock acquired through vesting of RSUs or similar full-value awards or upon the exercise of stock options, except to pay for applicable taxes or the exercise price.

Shares that count toward satisfaction of the guidelines include shares owned outright by the Covered Officer or his or her immediate family members residing in the same household and shares held in trust for the benefit of the Covered Officer or his or her family. Unexercised and/or unvested equity awards do not count toward satisfaction of the guidelines.

Our stock ownership guidelines may be waived, at the discretion of the Board or the Governance and Risk Committee if compliance would create undue hardship or prevent a Covered Officer from complying with a court order, as in the case of a divorce settlement. It is expected that these instances will be rare.

401(k) Plan

We provide a 401(k) Plan to our employees under which they may defer compensation for income tax purposes under Section 401(k) of the Code. Under our current 401(k) Plan, we provide a fully vested contribution equal to 4.0% of each employee's (including each named executive officer's) base salary and bonus payments for each plan year. All contributions to the 401(k) plan by or on behalf of employees, including the Company's 4.0% contribution, are subject to the aggregate annual limits prescribed by the Code.

Tax Deductibility of Executive Compensation

Section 162(m) of the Code generally places a \$1 million limit on the amount of compensation a company can deduct in any one year for certain executive officers and certain other individuals. Prior to the Tax Cuts and Jobs Act of 2017, which was signed into law December 22, 2017, there was an exception to the deduction limitation for "performance-based" compensation. The Tax Cuts and Jobs Act of 2017 eliminated this exception for "performance-based" compensation, effective for taxable years beginning after December 31, 2017. Therefore, compensation in excess of \$1 million paid to our named executive officers in 2018 and later years will not be deductible unless it qualifies for transition relief applicable to certain arrangements in place as of November 2, 2017 that are not subsequently materially modified. While the Board and Compensation Committee consider tax deductibility as one factor in determining executive compensation, the Board and Compensation Committee also look at other factors in making their decisions, as noted above, and retain the flexibility to award compensation that they determine to be consistent with the goals of our executive compensation program even if the awards are not deductible by us for tax purposes. Accordingly, compensation paid to our named executive officers in excess of \$1 million will not be deductible unless it qualifies for the transition relief applicable to certain arrangements in place as of November 2, 2017, as described above. The Board and Compensation Committee believe that shareholder interests are best served if its discretion and flexibility in awarding compensation is not restricted, even though some compensation awards may result in non-deductible compensation expenses.

COMPENSATION COMMITTEE REPORT²

The Compensation Committee has reviewed the "Compensation Discussion and Analysis" section of this Proxy Statement and discussed such section with management. Based on its review and discussions and its ongoing involvement with executive compensation matters, the Compensation Committee recommended to the Board that the "Compensation Discussion and Analysis" section of this Proxy Statement be included in this Proxy Statement and incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2019. This report is provided by the following independent directors who comprise the Compensation Committee:

James Sulat, Chair
John Fallon
Gino Santini
Paul Fonteyne

- 2 The material in this report is not "soliciting material," is furnished to, but not deemed "filed" with, the SEC and is not deemed to be incorporated by reference in any filing of the Company under the Securities Act or the Exchange Act, other than the Company's Annual Report on Form 10-K, where it shall be deemed to be "furnished," whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Summary of Executive Compensation

The following table sets forth for the fiscal years ended December 31, 2019, 2018 and 2017 compensation awarded, paid to, or earned by, our President and Chief Executive Officer (our principal executive officer), our Chief Financial Officer (our principal financial officer), and our three other most highly compensated executive officers at December 31, 2019 (our "named executive officers").

SUMMARY COMPENSATION TABLE FOR THE 2019, 2018 and 2017 FISCAL YEARS

Name and Principal Position	Year	Salary (\$)(1)	Bonus (\$)	Stock Awards (\$)(2)	Option Awards (\$)(2)	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$)(3)	Total (\$)
William K. Heiden President and Chief Executive Officer	2019	791,265	—	3,044,790	546,714	474,311	11,200	4,868,280
	2018	780,635	—	2,223,130	1,071,850	879,600	11,000	4,966,215
	2017	702,973	—	2,355,350	729,274	553,350	8,100	4,349,047
Edward Myles Chief Financial Officer and Chief Operating Officer and Treasurer	2019	454,888	50,000(4)	575,040	195,255	158,507	11,200	1,444,8903
	2018	456,794	—	488,600	257,244	323,700	11,000	1,537,338
	2017	428,847	—	402,150	224,392	216,113	8,100	1,279,602
Anthony Casciano Chief Commercial Officer	2019	417,769	50,000(4)	462,033	291,132	146,223	11,200	1,378,357
Julie Krop, M.D. Chief Medical Officer and Executive Vice President, Clinical and Regulatory Affairs	2019	468,689	50,000(4)	446,850	195,255	148,469	11,200	1,320,463
	2018	471,139	—	607,320	235,807	305,800	11,000	1,631,066
	2017	441,885	—	402,150	224,392	194,040	8,100	1,270,567
Joseph Vittiglio Chief Business Officer, General Counsel and Secretary	2019	451,763	50,000(4)	544,320	195,255	159,321	11,200	1,411,859
	2018	429,924	—	530,600	214,370	304,700	11,000	1,490,594
	2017	401,670	—	402,150	224,392	167,400	8,100	1,203,712

- (1) Amounts shown represent base salary amounts earned by our named executive officers in fiscal years 2019, 2018 and 2017. Salary increases generally occur once each year and are not retroactive to the beginning of that year. For this reason, the amount earned by the named executive officer in a given fiscal year may be lower than such officer's base salary rate for the majority of the year. In addition, during 2018, the Company implemented a flexible vacation time off policy for

employees in positions of Vice President or above. Accordingly, included in the amounts reported for 2018 above are the following one-time cash payouts for vacation time accumulated prior to the effective date of the new policy: Mr. Heiden: \$26,923; Mr. Myles: \$16,346; Mr. Vittiglio: \$15,385; and Dr. Krop: \$16,923.

- (2) The amounts shown do not reflect compensation actually received by the named executive officers but represent the aggregate grant date fair value of stock options, RSUs or PSUs granted to our named executive officers and are calculated in accordance with current guidance under accounting for stock-based compensation, disregarding adjustments for the forfeitures. Option awards are valued using a Black-Scholes valuation model. Time-based RSUs are valued by multiplying the closing market price of a share of our common stock on the grant date by the number of RSUs granted. PSUs are valued using a Monte-Carlo simulation model, which considered a range of potential future share prices of our stock as well as our peer companies in a selected market index over the performance period. The fair value of the PSUs is reported for the probable outcome, which for this purpose is the target level of achievement of the performance conditions. The fair value of the PSUs at the maximum level of achievement for those executive officers who received PSUs in 2019 is as follows: Mr. Heiden: \$3,843,180; Mr. Myles: \$582,300; Mr. Casciano \$221,885; Dr. Krop: \$436,725; and Mr. Vittiglio \$349,380. The assumptions used to value the stock option awards and PSUs for all periods presented above are set forth in Note M to our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on March 6, 2020. Further information regarding our 2019 awards is included in the "Grants of Plan-Based Awards Table for the 2019 Fiscal Year" and "Outstanding Equity Awards at December 31, 2019" tables below.
- (3) Includes Company 401(k) contributions for each named executive officer.
- (4) Represents the portion of the retention award each such executive earned for remaining employed through November 30, 2019. See the discussion above under *Executive Retention* for additional details regarding the executive retention awards.

Grants of Plan-Based Awards

The following table sets forth grants of plan-based awards to each of our named executive officers for the year ended December 31, 2019. Grants of equity incentive plan awards to each named executive officer were made pursuant to our 2007 Equity Incentive Plan, unless otherwise noted, and grants of non-equity incentive plan awards to each named executive officer were made pursuant to the executive bonus program described above under "2019 Annual Cash Bonus."

GRANTS OF PLAN-BASED AWARDS TABLE FOR THE 2019 FISCAL YEAR

Name	Grant Date	Grant Type	Estimated Future Payouts Under Non-Equity Incentive Plan Awards		Estimated Future Payouts Under Equity Incentive Plan Awards		All Other Stock Awards: Number of Shares of Stock or	All Other Option Awards: Number of Securities Underlying	Exercise or Base Price of Option	Grant Date Fair Value of Stock and Option
			Target (\$)(1)	Maximum (\$)(1)	Target (#)(2)	Maximum (#)(2)	Units (#)	Options (#)	Awards (\$)	Awards (\$)(3)
William K. Heiden		Incentive Plan	677,620	1,355,240						
	2/25/2019	Stock Options						70,000	15.57	546,714
	2/25/2019	RSUs					31,000			482,670
	2/25/2019	PSUs			132,000	198,000				2,562,120
Edward Myles		Incentive Plan	205,830	411,660						
	2/25/2019	Stock Options						25,000	15.57	195,255
	2/25/2019	RSUs					12,000			186,840
	2/25/2019	PSUs			20,000	30,000				388,200
Anthony Casciano	2/25/2019	Incentive Plan	189,900	379,800						
	2/25/2019	Stock Options						16,156	15.57	126,182
	2/25/2019	RSUs					7,621			118,659
	2/25/2019	PSUs			7,621	11,432				147,924
	4/4/2019	Stock Options						25,000	13.03	164,950
	4/4/2019	RSUs					15,000			195,450
Julie Krop, M.D		Incentive Plan	212,085	424,170						
	2/25/2019	Stock Options						25,000	15.57	195,255
	2/25/2019	RSUs					10,000			155,700
	2/25/2019	PSUs			15,000	22,500				291,150
Joseph Vittiglio		Incentive Plan	206,910	413,820						
	2/25/2019	Stock Options						25,000	15.57	195,255
	2/25/2019	RSUs					20,000			311,400
	2/25/2019	PSUs			12,000	18,000				232,920

- (1) The amounts reported in these columns represent the 2019 target and maximum cash incentive compensation award potential for each named executive officer. Based on our policy that no bonus awards will be issued in excess of 200% of the executive's target bonus, for purposes of this table, we have assumed that the maximum bonus amount payable to any named executive officer is equal to 200% of his or her target bonus amount. The Board and the Compensation Committee do not establish threshold bonus amounts. In March 2020, the Compensation Committee determined each executive officer's bonus amounts, resulting in the payouts detailed in the column labeled "Non-Equity Incentive Plan Compensation" in the Summary Compensation Table above.
- (2) The amounts reported in these columns represent the 2019 target and maximum number of PSU shares which will vest, if at all, at the end of the three-year performance period applicable to the PSUs assuming achievement of the relevant performance objectives, as described below in "Discussion of Summary Compensation and Grants of Plan-Based Awards Tables." The PSU awards granted in 2019 were made according to the metrics described below and are included in the Summary Compensation Table in the column labeled "Stock Awards."
- (3) Amounts shown represent the aggregate grant date fair value of stock options, RSUs and PSUs granted to our named executive officers and are calculated in accordance with current guidance under accounting for stock-based compensation, disregarding adjustments for forfeitures. The fair value of the PSUs is reported for the probable outcome, which for this purpose is the target level of achievement. See Summary Compensation Table footnote (2) for additional details. The fair value shown in the table may not be indicative of the value realized on the date the options are exercised or the RSUs or PSUs vest due to variability in the share price of our common stock.

OUTSTANDING EQUITY AWARDS AT DECEMBER 31, 2019

The following table sets forth certain information regarding outstanding equity awards held by each of our named executive officers at December 31, 2019:

Name	Grant Date	Option Awards(1)				Stock Awards(1)			
		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date(1)	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)
		(1)	(1)	(1)	Date(1)	(1)	(2)	(3)	(3)
William K. Heiden	5/14/2012	210,000(4)(5)	—	12.99	5/14/2022	—	—	—	—
	2/28/2013	86,300	—	16.55	2/28/2023	—	—	—	—
	2/27/2014	93,800	—	21.13	2/27/2024	—	—	—	—
	2/26/2015	60,000	—	49.46	2/26/2025	—	—	—	—
	3/1/2016	79,687	5,313	25.18	3/1/2026	—	—	—	—
	2/23/2017	44,687	20,313	23.75	2/23/2027	—	—	—	—
	2/23/2017	—	—	—	—	10,002	121,724	—	—
	2/23/2017	—	—	—	—	—	—	55,000(6)	669,350
	3/2/2018	43,750	56,250	21.00	3/2/2028	—	—	—	—
	3/2/2018	—	—	—	—	30,335	369,177	—	—
	3/2/2018	—	—	—	—	—	—	45,500	553,735
	2/25/2019	—	70,000	15.57	2/25/2029	—	—	—	—
	2/25/2019	—	—	—	—	31,000	377,270	—	—
2/25/2019	—	—	—	—	—	—	132,000	1,606,440	
Edward Myles	4/11/2016	26,250(4)(5)	8,750(4)(5)	24.58	4/11/2026	—	—	—	—
	2/23/2017	13,750	6,250	23.75	2/23/2027	—	—	—	—
	2/23/2017	—	—	—	—	2,501	30,437	—	—
	2/23/2017	—	—	—	—	—	—	7,500(6)	91,275
	3/2/2018	10,500	13,500	21.00	3/2/2028	—	—	—	—
	3/2/2018	—	—	—	—	6,667	81,137	—	—
	3/2/2018	—	—	—	—	—	—	10,000	121,700
	2/25/2019	—	25,000	15.57	2/25/2029	—	—	—	—
	2/25/2019	—	—	—	—	12,000	146,040	—	—
	2/25/2019	—	—	—	—	—	—	20,000	243,400
Anthony Casciano	9/6/2016	15,000(4)(5)	5,000	24.18	9/6/2026	—	—	—	—
	2/23/2017	5,500	2,500	23.75	2/23/2027	—	—	—	—
	2/23/2017	—	—	—	—	1,334	16,235	—	—
	2/23/2017	—	—	—	—	—	—	4,000(6)	48,680
	3/2/2018	7,875	10,125	21.00	3/2/2028	—	—	—	—
	3/2/2018	—	—	—	—	5,334	64,915	—	—
	3/2/2018	—	—	—	—	—	—	10,000	121,700
	10/11/2018	2,500	5,500	21.60	10/11/2028	—	—	—	—
	10/11/2018	—	—	—	—	2,667	32,457	—	—
	2/25/2019	—	16,156	15.57	2/25/2029	—	—	—	—
	2/25/2019	—	—	—	—	7,621	92,748	—	—
2/25/2019	—	—	—	—	—	—	7,621	92,748	
4/4/2019	—	25,000	13.03	4/4/2029	—	—	—	—	
4/4/2019	—	—	—	—	15,000	182,550	—	—	
Julie Krop, M.D.	6/1/2015	30,000(4)(5)	—	68.81	6/1/2025	—	—	—	—
	3/1/2016	21,093	1,407	25.18	3/1/2026	—	—	—	—
	2/23/2017	13,750	6,250	23.75	2/23/2027	—	—	—	—
	2/23/2017	—	—	—	—	2,501	30,437	—	—
	2/23/2017	—	—	—	—	—	—	7,500(6)	91,275
	3/2/2018	9,625	12,375	21.00	3/2/2028	—	—	—	—
	3/2/2018	—	—	—	—	8,668	105,490	—	—
	3/2/2018	—	—	—	—	—	—	12,000	146,040
	2/25/2019	—	25,000	15.57	2/25/2029	—	—	—	—
	2/25/2019	—	—	—	—	10,000	121,700	—	—
	2/25/2019	—	—	—	—	—	—	15,000	182,550
Joseph Vittiglio	8/24/2015	30,000(4)(5)	—	57.60	8/24/2025	—	—	—	—
	3/1/2016	18,750	1,250	25.18	3/1/2026	—	—	—	—
	2/23/2017	13,750	6,250	23.75	2/23/2027	—	—	—	—
	2/23/2017	—	—	—	—	2,501	30,437	—	—
	2/23/2017	—	—	—	0	—	—	7,500(6)	91,275
	3/2/2018	8,750	11,250	21.00	3/2/2028	—	—	—	—
	3/2/2018	—	—	—	—	8,001	97,372	—	—
	3/2/2018	—	—	—	—	—	—	10,000	121,700
	2/25/2019	—	25,000	15.57	2/25/2029	—	—	—	—
	2/25/2019	—	—	—	—	20,000	243,400	—	—
2/25/2019	—	—	—	—	—	—	12,000	146,040	

(1) Unless otherwise specified: (a) all option and RSU awards dated on or before May 15, 2019 were granted under our 2007 Equity Incentive Plan and all option and RSU awards dated on or after May 16, 2019 were granted under our 2019 Equity Incentive Plan; (b) all option awards have a ten-year term; (c) all option awards vest over four years from the grant date, with 25% vesting on the first anniversary of the grant date and the remainder vesting in equal quarterly installments over the next three years thereafter; and (d) all RSU awards vest in equal annual installments over a

three-year period beginning on the first anniversary of the grant date. In addition, the exercise price for all stock option awards set forth in this table is the fair market value of a share of our common stock on the date of grant.

- (2) Each RSU entitles the holder thereof to receive one share of our common stock for each RSU granted upon vesting or settlement. The market value is calculated by multiplying \$12.17, the closing price of a share of our common stock on the last trading day of 2019 (December 31, 2019) as reported on NASDAQ, by the number of unvested units.
- (3) Each PSU entitles the holder thereof to receive one share of our common stock for each PSU granted upon vesting or settlement. The number of PSU shares earned under these awards is determined based on the TSR of our common stock relative to the TSR of the constituents of the Peer Group as of the beginning of the three year performance period, as applicable to each grant. The number of shares included in the table above represents the target shares awarded however; the final shares awarded can range from zero to 150% of the target award amount based on our final TSR relative to our Peer Group. The market value is calculated by multiplying \$12.17, the closing price of a share of our common stock on the last trading day of 2019 (December 31, 2019) as reported on NASDAQ, by the number of unvested units. In the event that a Sale Event (as defined in the applicable Equity Incentive Plan) occurs prior to the end of a performance period, each PSU will be deemed earned with respect to the higher of (i) the target award, multiplied by a fraction, the numerator of which shall be the number of calendar days from the first day of the applicable performance period to the valuation date and the denominator of which shall be the number of days in the performance period or (ii) the number of PSUs based on the attainment level resulting from the index relative TSR return, calculated from the first day of the applicable performance period through the end of the calendar month immediately preceding the date of the Sale Event.
- (4) Represents a new hire grant awarded outside of our stockholder approved equity plans in reliance on NASDAQ Listing Rule 5635(c)(4).
- (5) This award vests in equal annual installments over a four-year period beginning on the first anniversary of the grant date.
- (6) These PSUs did not satisfy the performance criteria and, accordingly, were forfeited in full.

OPTION EXERCISES AND STOCK VESTED IN FISCAL 2019

The following table sets forth certain information regarding option exercises and stock vested during the year ended December 31, 2019 with respect to each of our named executive officers:

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(1)
William K. Heiden	—	—	37,167	556,084
Edward Myles	—	—	12,501	171,120
Anthony Casciano	—	—	8,666	114,449
Julie Krop, M.D.	—	—	9,833	147,010
Joseph Vittiglio	—	—	9,500	142,095

- (1) Unless otherwise specified, value is calculated by multiplying the number of underlying shares by the closing price of a share of our common stock on the vesting date.

CHANGE OF CONTROL AND SEVERANCE COMPENSATION

Benefits Provided Upon Termination Not in Connection with a Change of Control

We have entered into employment agreements with all of our named executive officers, which provide certain benefits to our executive officers in the event of certain terminations of employment not in connection with a change of control. Our philosophy is that appropriate provision should be made for our executive officers in the event of a termination of their employment with us without cause or if they resign for good reason. We believe that providing such severance compensation encourages our executives to exercise independent business judgment in what they believe to be in the best interests of the Company and those of our stockholders without concern of being terminated without appropriate compensation. We also believe that these mutually-agreed to severance arrangements are appropriate because they are necessary to recruit, retain and motivate key executive talent. Accordingly, our named executive officer's employment agreements provide the following severance benefits, in the event of a termination of employment of the named executive officer, other than for death, disability or cause, or he or she resigns for good reason, and he or she has complied with all his or her obligations under all agreements with us and signs a general release of claims in a form acceptable to us:

- An amount equal to 12 months (or 24 months in the case of our Chief Executive Officer) of his or her then current base salary paid in equal installments over the severance period in accordance with our usual payroll schedule; and

- All time-based stock options and other time-based equity awards which would have vested if the named executive officer had been employed for an additional 12 months (or 24 months in the case of our Chief Executive Officer) following the date of termination.

Further, in 2019, the employment agreements with each of our named executive officers other than our Chief Executive Officer were amended to provide that if the named executive officer elects continuation of health benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the executive will be entitled to receive an amount equal to what we would have paid to provide the executive with similar health coverage for an active employee for up to 12 months

Benefits Provided Upon Termination in Connection with a Change of Control

Our change of control compensation arrangements are designed to align to our philosophy that appropriate provision should be made for our executive officers both upon the occurrence of a change of control of the Company and in the event their employment is terminated within one year following such a change of control. We believe that providing severance compensation if an executive officer is terminated as a result of a change of control promotes the ability of our executives to act in the best interests of our stockholders even where a transformative transaction may result in termination of the executive's employment. We also believe that these mutually-agreed to severance arrangements are appropriate because they are necessary to recruit, retain and motivate key executive talent.

In the event that upon a change of control, the Company or the successor to or acquirer of the Company's business elects not to assume all the then unvested outstanding stock options, RSUs and other equity incentives that were granted to the executive officer prior to the change of control (other than PSUs), such securities will become vested in full as of the date of the change of control. Upon a change of control, any PSUs shall be deemed earned and vested at the higher of (i) target, prorated to reflect the portion of the performance period that had elapsed prior to the change in control or (ii) actual performance, based on the Company performance through the change in control.

Further, in the event that within one year from the date a change of control of the Company occurs, we or our successor terminates the employment of our named executive officers other than for death, disability or cause, or he or she resigns for good reason, and he or she has complied with all his obligations under all agreements with us and signs a general release of claims in a form acceptable to

us or our successor, then we or our successor are obligated to provide the executive with the following benefits post-termination pursuant to his or her employment agreement:

	Mr. Heiden *	All Other Named Executive Officers
Base Salary (paid in equal installments over the severance period in accordance with our usual payroll schedule)	24 months	12 months
Annual Target Bonus (paid in a lump sum)	Two times target annual bonus amount for the year in which the change of control occurs.	One times target annual bonus amount for the year in which the change of control occurs.
Health and Dental Benefits (payment or reimbursement of the premiums for continued health and dental benefits)	Until the earlier of (a) 12 months following termination and (b) health and dental coverage being provided to Mr. Heiden under another employer's health and dental plans.	Until the earlier of (a) 24 months following termination and (b) health and dental coverage being provided to the executive under another employer's health and dental plans.
Vesting of Equity Awards	The full acceleration of vesting of any time-based unvested outstanding stock options, RSUs and other equity incentives that were granted before such change of control.	The full acceleration of vesting of any time-based unvested outstanding stock options, RSUs and other equity incentives that were granted before such change of control.

* See discussion above under *2020 Executive Transitions* for a discussion of Mr. Heiden's separation letter.

In addition, these employment agreements contain a provision which provides that any payments and benefits due to the executive in connection with a change of control that would otherwise be subject to an excise tax under Section 4999 of the Code shall be reduced, but only if such reduction would result in the executive retaining a larger portion of such payments on an after-tax basis than if no reduction was made and the excise taxes had been paid (a so-called modified cutback provision).

Benefits Provided in the Event of Death and Disability

The employment agreements of our named executive officers also provide that, in the event of the death or permanent disability of the executive, all unvested equity awards then held by such executive shall become immediately vested in full. In addition, in the event of his or her death, the executive's estate shall be eligible to receive a pro rata portion of his or her performance bonus for such year based upon the Board's determination of progress against corporate performance objectives as of the time of such executive's death.

Other

Our named executive officers are also subject to the terms of a Non-Disclosure, Non-Competition, Non-Solicitation, and Invention Assignment Agreement with us, and the terms of these agreements survive the termination of the named executive officer's employment for a period of one year.

POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE OF CONTROL

The table below sets forth the estimated amount of payments and other benefits each named executive officer would have been entitled to receive upon the occurrence of the indicated event, assuming that the event occurred on December 31, 2019. The information is provided relative to the named executive officer's termination or change of control policies or arrangements in place on such date. The values relating to vesting of stock options, RSU and PSU awards are based upon a per share fair market value of our common stock of \$12.17, the closing price of a share of our common stock as reported on NASDAQ on December 31, 2019. Actual payments made at any future date will fluctuate

based on various factors, including salary and bonus levels, the vesting schedules of the various equity-based awards, and the price of our common stock at the time of termination or change of control.

Name	Salary and Other Cash Payments (\$)(1)	Vesting of Stock Options (\$)(2)	Vesting of RSUs (\$)(3)	Vesting of PSUs (\$)(3)	Health and Dental Benefits (\$)	Total (\$)
William K. Heiden						
Termination without cause or resignation for good reason other than in the context of a change of control	1,594,400	—	742,407	—	19,150	2,355,957
Termination without cause or resignation for good reason within 12 months following a change of control(4)	2,949,640	—	868,171	1,429,834	23,937	5,271,583
Termination upon death	474,311	—	868,171	—	—	1,342,471
Termination upon disability	—	—	868,171	—	—	868,171
Edward Myles						
Termination without cause or resignation for good reason other than in the context of a change of control	457,400	—	119,668	—	19,150	596,218
Termination without cause or resignation for good reason within 12 months following a change of control(4)	663,230	—	257,615	230,099	47,875	1,198,818
Termination upon death	158,507	—	257,615	—	—	416,122
Termination upon disability	—	—	257,615	—	—	257,615
Anthony Casciano						
Termination without cause or resignation for good reason other than in the context of a change of control	422,000	—	156,652	—	19,150	597,802
Termination without cause or resignation for good reason within 12 months following a change of control(4)	611,900	—	388,905	146,954	47,875	1,195,634
Termination upon death	146,223	—	388,905	—	—	535,128
Termination upon disability	—	—	388,905	—	—	388,905
Julie Krop, M.D.						
Termination without cause or resignation for good reason other than in the context of a change of control	471,300	—	123,732	—	19,150	614,182
Termination without cause or resignation for good reason within 12 months following a change of control(4)	683,385	—	257,627	227,767	47,875	1,216,654
Termination upon death	148,469	—	257,627	—	—	406,096
Termination upon disability	—	—	257,627	—	—	257,627
Joseph Vittiglio						
Termination without cause or resignation for good reason other than in the context of a change of control	459,800	—	160,242	—	19,150	639,192
Termination without cause or resignation for good reason within 12 months following a change of control(4)	666,710	—	371,209	202,561	47,875	1,288,355
Termination upon death	159,321	—	371,209	—	—	530,530
Termination upon disability	—	—	371,209	—	—	371,209

- (1) Amount represents the contractual amounts payable under the executive's employment agreement as described above, assuming the base salary and target bonus in effect as of December 31, 2019.
- (2) The amount shown in this column represents the difference between the exercise price and the fair market value of the accelerated options assuming a \$12.17 fair market value of a share of our common stock based on the reported closing price on NASDAQ on December 31, 2019. Any option with an exercise price of greater than \$12.17 was assumed to be canceled for no consideration and, therefore, had no intrinsic value.

- (3) The amount shown in this column was calculated by multiplying the executive's number of unvested RSU and PSU shares at December 31, 2019 scheduled to vest upon the specified event by \$12.17, the fair market value of a single share of our common stock on December 31, 2019. For purposes of this table, we have assumed that the number of PSU shares that would vest upon termination within 12 months of a change in control is the target amount as prorated by the number of days from the beginning of the performance measurement period to December 31, 2019 over the total number of days in the performance measurement period.
- (4) In the event the executive would become subject to an excise tax under Section 4999 of the Code imposed on parachute payments (within the meaning of 280G of the Code), the amounts payable as described above in connection with a change in control would be reduced to the level so that the excise tax will not apply, but only if such reduction would result in a greater after-tax amount to the executive.

CEO PAY RATIO

AMAG's compensation and benefits philosophy and the overall structure of our compensation and benefit programs encourage and reward all employees who contribute to our success. We strive to ensure that the pay of every employee reflects the level of their job impact and responsibilities and is competitive within our peer group. Compensation rates are benchmarked and set to be market-competitive. As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(u) of Regulation S-K (the "CEO Pay Ratio Rule"), we identified our median compensated employee using a "Consistently Applied Compensation Measure", which we believe closely approximates the annual total direct compensation for our employees. Specifically, we identified our median employee by calculating the sum of annual base pay, bonus opportunity at target and the grant date fair value for standard equity awards for all of our employees, excluding Mr. Heiden, who were employed by us on October 2, 2019. We annualized the base salary and target bonus of all permanent employees who were hired in 2019 but did not work the entire year. However, we did not perform adjustments to the compensation paid to part-time employees to calculate what they would have been paid on a full-time basis. After identifying the median compensated employee, we calculated the total annual compensation for this employee by using the same methodology we use for our named executive officers as disclosed in the Summary Compensation Table above.

The annual total compensation of our Chief Executive Officer, Mr. Heiden, as reported in the Summary Compensation Table was \$4,868,280. The annual total compensation of our median compensated employee was \$189,221, resulting in a ratio of 26:1, which is at approximately the 25th percentile of the Company's peer group (based on peers' 2019 disclosure). This ratio and annual total compensation amounts are reasonable estimates that have been calculated using methodologies and assumptions permitted by SEC rules. This information is being provided for compliance purposes. Neither the Compensation Committee nor management of the Company used the pay ratio measure in making compensation decisions. Given that assumptions, estimates, methodologies, and adjustments that companies may apply in compliance with the CEO Pay Ratio Rule may differ, this information should not be used as a basis for comparison between different companies.

EQUITY COMPENSATION PLAN INFORMATION

The following table presents information at December 31, 2019 regarding shares of common stock that may be issued under our equity compensation plans (consisting of the 2019 Equity Incentive Plan, the 2007 Equity Incentive Plan, Lumara Health Inc. Amended and Restated 2013 Incentive Compensation Plan (the "2013 Lumara Health Equity Incentive Plan") and the 2015 Employee Stock Purchase Plan (the "ESPP")) and Inducement Awards.

Plan Category	Equity Compensation Plan Information		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights(1) (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities referenced in column (a)) (c)
Equity compensation plans approved by security holders(2)	4,593,925	20.90	3,082,317
Equity compensation plans not approved by security holders(3)	871,329	25.77	9,817
Total	5,465,254(4)		3,092,134

- (1) Since RSUs and PSUs do not have an exercise price, such units are not included in the weighted average exercise price calculation.
- (2) Includes 601,154 shares to be issued pursuant to outstanding awards under the 2019 Equity Incentive Plan and 3,992,771 shares to be issued pursuant to outstanding awards under the 2007 Equity Incentive Plan. As of December 31, 2019, there were 2,828,030 shares available for issuance under the 2019 Equity Incentive Plan and 254,287 shares available for issuance under the 2015 ESPP.
- (3) Includes 737,387 shares to be issued pursuant to Inducement Awards and 133,942 shares to be issued pursuant to awards under the 2013 Lumara Health Equity Incentive Plan, which was assumed in connection with our acquisition of Lumara Health. The weighted-average exercise price of the outstanding options under the 2013 Lumara Health Equity Incentive Plan as of December 31, 2019 was \$25.36. As of December 31, 2019, there were 9,817 shares available for future grants under the 2013 Lumara Health Equity Incentive Plan, which may be awarded to certain of our employees, officers, directors, consultants, and advisors of AMAG and our subsidiaries who are newly-hired or who previously performed services for Lumara Health.
- (4) Includes 3,885,817 shares of common stock issuable upon the exercise of outstanding options, 1,171,710 shares of common stock issuable upon the settlement of RSUs and 407,727 shares of common stock issuable upon the vesting of PSUs. The weighted average exercise price for the outstanding options was \$21.94 and the weighted average remaining contractual term was 6.8 years.

Please see Note M to our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on March 6, 2020 for additional information regarding our 2019 Equity Incentive Plan, the 2013 Lumara Health Equity Incentive Plan, 2015 ESPP and the Inducement Awards.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table summarizes the fees billed for professional services by PricewaterhouseCoopers LLP for the years ended December 31, 2019 and 2018:

Fee Category	Year Ended	
	December 31, 2019	December 31, 2018
Audit Fees(1)	\$ 1,887,500	\$ 2,963,500
Audit-Related Fees	0	46,500
All Other Fees(2)	2,700	2,700
Total	\$ 1,890,200	\$ 3,012,700

- (1) Audit fees consisted of fees for the audit of our financial statements, the review of our interim financial statements included in our quarterly reports on Form 10-Q, review of and consents for our registration statements and filings, comfort letters and related services that are normally provided in connection with regulatory filings or engagements.
- (2) All other fees represents payment for access to the PricewaterhouseCoopers LLP on-line accounting and disclosure database. These fees were approved by the Audit Committee.

In connection with the audit of our 2019 financial statements, we entered into an engagement agreement with PricewaterhouseCoopers LLP, which sets forth the terms by which PricewaterhouseCoopers LLP would perform our audit services.

All services expected to be rendered by PricewaterhouseCoopers LLP in 2020 are permissible under applicable laws and regulations, and are expected to be pre-approved by the Audit Committee. The Audit Committee also expects to approve certain non-audit services to be performed by PricewaterhouseCoopers LLP in 2020.

PRE-APPROVAL POLICIES AND PROCEDURES

Consistent with policies of the SEC regarding auditor independence, the Audit Committee has responsibility for appointing, setting compensation and overseeing the work of our independent registered public accounting firm.

The Audit Committee has approved the engagement of PricewaterhouseCoopers LLP as our independent registered public accounting firm and has approved the provision of certain specific non-audit services expected to be performed by PricewaterhouseCoopers LLP in 2020. In addition, circumstances may arise during the year necessitating the engagement of PricewaterhouseCoopers LLP for additional audit or permissible non-audit services. In those instances, under our current pre-approval policy, each member of the Audit Committee has the authority to approve any additional audit services and permissible non-audit services provided that such member promptly informs the Audit Committee of such approval.

OTHER MATTERS

The Board knows of no other matters to be brought before the Annual Meeting. If any other matters are properly brought before the Annual Meeting, the persons appointed in the accompanying proxy intend to vote the shares represented thereby in accordance with their best judgment on such matters, under applicable laws.

STOCKHOLDER PROPOSALS

Stockholder proposals may be included in our proxy statement for an annual meeting of stockholders so long as they are provided to us on a timely basis and are otherwise submitted in accordance with SEC regulations under Rule 14a-8 under the Exchange Act regarding the inclusion of stockholder proposals in company-sponsored proxy materials. To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing to our principal executive offices at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Secretary and must be received by us no later than December [·], 2020. Proposals must comply with the procedures and satisfy the conditions set forth in Rule 14a-8 under the Exchange Act.

If you wish to nominate a candidate for director or submit a proposal that is not intended to be included in our proxy materials for next year's annual meeting of stockholders, you must submit such proposal or nomination in writing to our principal executive offices at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Secretary. Such proposal or nomination must be received by us no earlier than [·], 2021 and no later than [·], 2021 and must satisfy the requirements set forth in our by-laws. If the date of our 2021 annual meeting of stockholders is advanced by more than 30 days or delayed by more than 30 days from the anniversary of our 2020 Annual Meeting, any stockholder nomination or other proposal must be received by us no earlier than the close of business on the 120th day prior to such advanced or delayed annual meeting date and no later than the close of business on the later of (1) the 90th day prior to such advanced or delayed annual meeting date and (2) the 10th day following the first public announcement of the meeting date.

In order to curtail controversy as to the date on which a proposal was received by us, we suggest that you submit your proposals by registered mail, return receipt requested.

We have not received any stockholder nominations or any other proposals from our stockholders with respect to our 2020 Annual Meeting.

EXPENSES AND SOLICITATION

We will bear all costs of solicitation of proxies. In addition to these proxy materials, our directors, officers and employees, without additional remuneration, may also solicit proxies through telephone, e-mail and in-person conversations. We will also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

We have engaged Innisfree M&A Incorporated ("Innisfree") to solicit proxies from stockholders in connection with the Annual Meeting. We will pay Innisfree a fee of approximately \$25,000, plus reasonable out-of-pocket fees and expenses for soliciting proxies. In addition, Innisfree and certain related persons will be indemnified against certain liabilities arising out of or in connection with the engagement.

DELIVERY OF DOCUMENTS TO STOCKHOLDERS SHARING AN ADDRESS

In order to reduce printing and postage costs, Broadridge, which handles the mailing of our Annual Report and proxy materials to all of our stockholders, participates in the practice of "householding" proxy statements and annual reports, which is the delivery of a single set of such annual meeting materials to two or more stockholders sharing the same address. This means that unless

contrary instructions are received from one or more of such stockholders, only one copy of our Notice and Proxy Statement and our Annual Report is sent to multiple beneficial stockholders who share the same address. Each stockholder will continue to receive a separate proxy card.

Once you have received notice from your Nominee that it will be householding communications to your address, householding will continue until you are notified otherwise or until you revoke your consent.

If, at any time, you no longer wish to participate in householding and would prefer to receive a separate set of annual meeting materials, you should contact our Investor Relations Department at (617) 498-3300 or AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Investor Relations. We will undertake to deliver promptly upon written or oral request a separate copy of the Notice and Proxy Statement and Annual Report, as applicable, to a security holder at a shared address to which a single copy of the documents was delivered. You may also contact Broadridge or your bank, broker or other custodian to request individual copies of any of these materials for each stockholder at such shared address. Stockholders who currently receive multiple copies of our Notice and Proxy Statement and Annual Report at their address and would like to request householding of their communications should contact their broker.

We do not provide for householding for stockholders of record.

The Board welcomes stockholders who wish to attend the Annual Meeting. Whether or not you plan to attend, you are urged to complete and deliver a proxy by one of the methods provided in the enclosed proxy card. A prompt response will greatly facilitate arrangements for the Annual Meeting, and your cooperation will be appreciated. Stockholders who attend the Annual Meeting may vote their stock during the meeting online even though they have sent in their proxies.

Copies of the Proxy Statement, AMAG's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and any other proxy materials are available without charge on our website at www.amagpharma.com under "Investors" or upon written request to our principal executive offices at AMAG Pharmaceuticals, Inc., 1100 Winter Street, Waltham, Massachusetts 02451, Attention: Investor Relations.

PRELIMINARY PROXY CARD – SUBJECT TO COMPLETION

VOTE BY INTERNET

Before The Meeting – Go to www.proxvvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time on [●], 2020. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During the Meeting – Go to www.virtualshareholdermeeting.com/AMAG2020

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time on [●], 2020. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

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

AMAG PHARMACEUTICALS, INC.
ATTN: INVESTOR RELATIONS
1100 WINTER STREET
WALTHAM, MA 02451

CONTROL # → 00000000000000000000

NAME

SHARES

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

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED

The Board of Directors recommends you vote FOR the following nominees:		For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.			
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
1. To elect the nine nominees nominated by our Board of Directors named herein to the Board of Directors to serve until the next annual meeting of stockholders and until their successors have been elected and qualified:								
Nominees:								
1a.	William K. Heiden	1b.	John A. Fallon, M.D.	1c.	Paul Fonteyne	1d.	David Johnson	
1f.	Anne M. Phillips, M.D.	1g.	Gino Santini	1h.	Davey S. Scoon	1i.	James R. Sulat	
1e.	Kathrine O'Brien							
The Board of Directors recommends you vote FOR proposals 2, 3 and 4.					For	Against	Abstain	
2. To approve the AMAG Pharmaceuticals, Inc. Stock Option Exchange Program for non-executive employees;					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. To approve the AMAG Pharmaceuticals, Inc. Stock Option Exchange Program for certain executive employees; and					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in the proxy statement.					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: Your proxy holder will also vote on any other business as may properly come before the Annual Meeting or any adjournments or postponements thereof.								
For address changes/comments, mark here. (see reverse for instructions)								
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.								
Signature [PLEASE SIGN WITHIN BOX]			Date		Signature (Joint Owners)			Date

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held on [●], 2020: The Notice and Proxy Statement, this Proxy Card, AMAG'S Annual Report on Form 10-K and any other proxy materials are available at www.proxyvote.com.

AMAG PHARMACEUTICALS, INC.
Annual Meeting of Stockholders
[●], 2020 [●]
This proxy is solicited by the Board of Directors

The stockholder hereby appoints Edward Myles and Joseph D. Vittiglio, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of AMAG PHARMACEUTICALS, INC. that the stockholder is entitled to vote at the Annual Meeting of Stockholders (the "Annual Meeting") to be held virtually at www.virtualshareholdermeeting.com/AMAG2020 on [●], 2020 at [●] Eastern Time, and at any adjournment or postponement thereof, upon matters set forth in the Notice of Annual Meeting of Stockholders and Proxy Statement dated [●], 2020, a copy of which has been received by the undersigned.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations (i) "FOR" the election of each of the nominees for director; (ii) "FOR" the approval of the AMAG Pharmaceuticals, Inc. Stock Option Exchange Program for non-executive employees; (iii) "FOR" the approval of the AMAG Pharmaceuticals, Inc. Stock Option Exchange Program for certain executive employees; (iv) "FOR" the approval, on an advisory basis, of the compensation of the Company's named executive officers; and (v) in the discretion of the proxies upon such matters as may properly come before the Annual Meeting.

Address Changes/Commitments: _____

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

Continued and to be signed on reverse side