Filed by the Registrant $\ oxdim$

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by a Party other than the Registrant $\ \square$

Cneck	tne appr	opriate box:
	Prelim	inary Proxy Statement
	Confi	dential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
\boxtimes	Defini	tive Proxy Statement
	Defini	tive Additional Materials
	Solicit	ing Material under §240.14a-12
		MINERVA NEUROSCIENCES, INC. (Name of Registrant as Specified In Its Charter)
		(Name of Person(s) Filing Proxy Statement, if other than the Registrant)
Payme	ent of Fil	ing Fee (Check the appropriate box):
\boxtimes	No fee	e required.
	Fee co	omputed 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 pa	aid previously with preliminary materials.
		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. fy 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:

MINERVA NEUROSCIENCES, INC. 1601 Trapelo Road Suite 286 Waltham, MA 02451

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On June 19, 2020

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of Minerva Neurosciences, Inc., a Delaware corporation, referred to hereafter as the "Company," "we," "us," and "Minerva." We have decided to hold our Annual Meeting virtually via the Internet at www.virtualshareholdermeeting.com/NERV2020 (the "Annual Meeting") due to the coronavirus pandemic (COVID-19); we are sensitive to the public health and travel concerns our stockholders may have and the protocols that federal, state, and local governments may impose. We believe that hosting a virtual meeting will enable greater stockholder attendance and participation from any location around the world. The Annual Meeting will be held virtually on Friday, June 19, 2020 at 8:00 a.m. Eastern time at www.virtualshareholdermeeting.com/NERV2020 for the following purposes:

- 1. To elect the Board of Directors' nominees, David Kupfer and Jan van Heek, to the Board of Directors to hold office until the 2023 Annual Meeting of Stockholders.
- 2. To approve the Company's Amended and Restated 2013 Equity Incentive Plan to, among other things, increase the aggregate number of shares of common stock authorized for issuance under the plan by 2,000,000 shares.
- 3. To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in this proxy statement.
- **4.** To indicate, on an advisory basis, the preferred frequency of stockholder advisory votes on the compensation of the Company's named executive officers.
- 5. To ratify the selection by the Audit Committee of the Board of Directors of Deloitte & Touche LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2020.
- **6.** To conduct any other business properly brought before the meeting.

These items of business are more fully described in the Proxy Statement.

The record date for the Annual Meeting is April 22, 2020. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment or postponement thereof.

Instructions on how to participate in the Annual Meeting and demonstrate proof of stock ownership are posted at www.virtualshareholdermeeting.com/NERV2020. Stockholders may vote and ask questions while connected to the Annual Meeting on the Internet. The webcast of the Annual Meeting will be archived for one year after the date of the Annual Meeting at www.virtualshareholdermeeting.com/NERV2020.

You will not be able to attend the Annual Meeting in person.

By Order of the Board of Directors

/s/ Devin Smith

Devin Smith Corporate Secretary Waltham, Massachusetts April 28, 2020

You are cordially invited to attend the Annual Meeting. Whether or not you expect to attend the Annual Meeting, please vote by telephone, over the Internet as instructed in these materials, or, if you receive a paper proxy card by mail, by completing and returning the proxy card mailed to you as promptly as possible in order to ensure your representation at the Annual Meeting. Even if you have voted by proxy, you may still vote if you attend the Annual Meeting.

MINERVA NEUROSCIENCES, INC. 1601 Trapelo Road Suite 286 Waltham, MA 02451

PROXY STATEMENT FOR THE 2020 ANNUAL MEETING OF STOCKHOLDERS

To Be Held On June 19, 2020

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why did I receive a notice regarding the availability of proxy materials on the Internet?

Pursuant to rules adopted by the Securities and Exchange Commission, or the SEC, we have elected to provide access to our proxy materials over the Internet. Accordingly, we have sent you a Notice of Internet Availability of Proxy Materials, or the Notice, because the Board of Directors of the Company, or the Board, is soliciting your proxy to vote at the 2020 Annual Meeting of Stockholders, or the Annual Meeting, including at any adjournments or postponements of the meeting. The Notice contains instructions about how to access our proxy materials online and vote online. All stockholders will have the ability to access the proxy materials at the website referred to in the Notice or request to receive a printed set of the proxy materials, including a proxy card. Instructions on how to request a printed copy of the proxy materials may be found in the Notice.

We intend to mail the Notice on or about April 28, 2020 to all stockholders of record entitled to vote at the Annual Meeting.

Will I receive any other proxy materials by mail?

We may send you a proxy card, along with a second Notice, on or after May 8, 2020.

How do I attend the Annual Meeting?

The Annual Meeting will be held virtually through an audio webcast on Friday, June 19, 2020 at 8:00 a.m. Eastern time at www.virtualshareholdermeeting.com/NERV2020. There will be no physical meeting location. The meeting will only be conducted via an audio webcast due to the coronavirus pandemic (COVID-19) as we are sensitive to the public health and travel concerns our stockholders may have and the protocols that federal, state, and local governments may impose. Information on how to vote by virtually attending the Annual Meeting is discussed below.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on April 22, 2020 are entitled to notice of and to vote at the Annual Meeting. On this record date, there were 39,219,134 shares of common stock outstanding and entitled to vote. A list of stockholders entitled to vote at the Annual Meeting will be available for examination during the Annual Meeting at www.virtualshareholdermeeting.com/NERV2020. In addition, information on how to obtain access to the stockholder list will be available during the ten days preceding the meeting at http://ir.minervaneurosciences.com.

Stockholder of Record: Shares Registered in Your Name

If on April 22, 2020 your shares were registered directly in your name with our transfer agent, Computershare Trust Company, N.A., then you are a stockholder of record. As a stockholder of record, you may vote by

virtually attending the meeting, vote by proxy by completing and returning a proxy card, or vote over the Internet. Whether or not you plan to virtually attend the meeting, we urge you to vote by completing and returning a proxy card or by voting over the Internet to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on April 22, 2020 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and the Notice is being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to virtually attend the Annual Meeting via the following link: www.virtualshareholdermeeting.com/NERV2020. However, because you are not the stockholder of record, you may not vote your shares virtually at the meeting via the link unless you request and obtain a valid proxy from your broker or other agent.

Can I attend the Annual Meeting?

We will be hosting the Annual Meeting live via the Internet. You will not be able to attend the Annual Meeting in person. Any stockholder can listen to and participate in the Annual Meeting live via the Internet at www.virtualshareholdermeeting.com/NERV2020. Our Board annually considers the appropriate format of our annual meeting. Our virtual annual meeting allows stockholders to submit questions and comments before and during the meeting. After the meeting, we will spend up to 15 minutes answering stockholder questions that comply with the meeting rules of conduct; the rules of conduct will be posted on the virtual meeting web portal. To the extent time doesn't allow us to answer all of the appropriately submitted questions, we will answer them in writing on our investor relations website, at http://ir.minervaneurosciences.com/, soon after the meeting. If we receive substantially similar questions, we will group such questions together and provide a single response to avoid repetition.

The Annual Meeting webcast will begin promptly at 8:00 a.m., Eastern Time. We encourage you to access the Annual Meeting webcast prior to the start time. Online check-in will begin, and stockholders may begin submitting written questions, at 7:45 a.m., Eastern Time, and you should allow ample time for the check-in procedures.

What do I need in order to be able to participate in the Annual Meeting?

You will need the 16-digit control number included on your Notice of Internet Availability or your proxy card or voting instruction form (if you received a printed copy of the proxy materials) or included in the email to you if you received the proxy materials by email in order to be able to vote your shares or submit questions during the Annual Meeting. Instructions on how to connect to the Annual Meeting and participate via the Internet, are posted at www.virtualshareholdermeeting.com/NERV2020. If you do not have your 16-digit control number, you will be able to access and listen to the Annual Meeting but you will not be able to vote your shares or submit questions during the Annual Meeting.

We will have technicians ready to assist you with any technical difficulties you may have accessing the virtual meeting or submitting questions. If you encounter any difficulties accessing the virtual 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.

What am I voting on?

There are five matters scheduled for a vote:

- Election of two directors (Proposal 1);
- Approval of the Company's Amended and Restated 2013 Equity Incentive Plan which, among other things, increases the aggregate number
 of shares of common stock authorized for issuance under the plan by 2,000,000 shares (Proposal 2).
- Advisory approval of the compensation of the Company's named executive officers, as disclosed in this proxy statement in accordance with SEC rules (Proposal 3).
- Advisory indication of the preferred frequency of stockholder advisory votes on the compensation of the Company's named executive
 officers (Proposal 4); and
- Ratification of the selection by the Audit Committee of the Board of Deloitte & Touche LLP as the independent registered public
 accounting firm of the Company for its fiscal year ending December 31, 2020 (Proposal 5);

What if another matter is properly brought before the meeting?

The Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

You may either vote "For" the nominees to the Board or you may "Withhold" your vote for such nominees. For the other items of business, you may vote "For" or "Against" or abstain from voting.

The procedures for voting are as follows:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote by virtually attending the Annual Meeting (by visiting www.virtualshareholdermeeting.com/NERV2020), vote by proxy over the telephone, vote by proxy over the Internet, or vote by proxy using a proxy card that you may request or that we may elect to deliver at a later time. Whether or not you plan to virtually attend the meeting, we urge you to vote by completing and returning a proxy card or by voting over the Internet to ensure your vote is counted. You may still virtually attend the meeting and vote even if you have already voted by proxy.

- To vote by virtually attending the Annual Meeting, please visit www.virtualshareholdermeeting.com/NERV2020 and follow the instructions provided.
- To vote using the proxy card, simply complete, sign and date the proxy card that you may request or that we may elect to deliver, and
 return it promptly in the envelope provided. If you return your signed proxy card to us before the Annual Meeting, we will vote your shares
 as you direct.
- To vote through the Internet, go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the control number from the Notice. Your Internet vote must be received by 11:59 p.m. Eastern time on June 18, 2020 to be counted.
- To vote over the telephone, dial toll-free 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the control number from the Notice. Your telephone vote must be received by 11:59 p.m. Eastern time on June 18, 2020 to be counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a notice containing voting instructions from that organization rather than from the Company. Simply follow the voting instructions in such notice to ensure that your vote is counted. To vote by virtually attending the Annual Meeting, you must obtain a valid proxy from your broker, bank or other agent.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of April 22, 2020.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record and do not vote by completing and returning a proxy card or voting over the Internet, by telephone or by virtually attending the Annual Meeting, your shares will not be voted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner and do not instruct your broker, bank or other nominee how to vote your shares, the question of whether your broker, bank or nominee will still be able to vote your shares depends on whether the particular proposal is a "routine" matter. Brokers, banks and nominees can use their discretion to vote "uninstructed" shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the New York Stock Exchange, "non-routine" matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation), and certain corporate governance proposals, even if management-supported. Accordingly, your broker, bank or nominee may not vote your shares on Proposal 1, Proposal 2, Proposal 3, or Proposal 4 without your instructions, but may vote your shares on Proposal 5 even in the absence of your instruction.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, "For" the election of the nominees to the Board, "For" advisory approval of the compensation of the Company's named executive officers, "For" one year as the preferred frequency of advisory votes to approve executive compensation, "For" approval of the amendment and restatement of our Amended and Restated 2013 Equity Incentive Plan and "For" the ratification of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2020. If any other matter is properly presented at the meeting, your proxyholder (designated company officers) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We have engaged The Proxy Advisory Group, LLC, to assist in the solicitation of proxies and provide related advice and informational support, for a services fee and the reimbursement of customary disbursements, which are not expected to exceed \$15,000 in total.

What does it mean if I receive more than one Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on each Notice to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

Yes. You can revoke your vote before the final vote at the meeting. If you are the record holder of your shares, you may revoke your vote in any one of the following ways:

- You may submit another properly completed proxy card with a later date.
- You may subsequently vote through the Internet or by telephone. Your Internet or telephone vote must be received by 11:59 p.m. Eastern time on June 18, 2020 to be counted.
- You may send a timely written notice that you are revoking your vote to the Company's Corporate Secretary at Minerva Neurosciences, Inc., 1601 Trapelo Road, Suite 286, Waltham, MA 02451.
- You may virtually attend the Annual Meeting and vote by visiting www.virtualshareholdermeeting.com/NERV2020. Simply attending the
 virtual meeting will not, by itself, revoke your vote.

Your most current proxy card or Internet vote is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by a broker, bank or other nominee, you should follow the instructions provided by your broker, bank or nominee.

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, your proposal must be submitted in writing by December 29, 2020, to the Company's Corporate Secretary at Minerva Neurosciences, Inc., 1601 Trapelo Road, Suite 286, Waltham, MA 02451, and you must comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act; provided, however, that if our 2021 Annual Meeting of Stockholders is held before May 20, 2021 or after July 19, 2021, then the deadline is a reasonable amount of time prior to the date we begin to print and mail our proxy materials for the 2021Annual Meeting of Stockholders.

Pursuant to our Bylaws, if you wish to bring a proposal before the stockholders or nominate a director at the 2021 Annual Meeting of Stockholders, but you are not requesting that your proposal or nomination be included in next year's proxy materials, you must notify our Corporate Secretary, in writing, not later than the close of business on March 21, 2021 nor earlier than the close of business on February 19, 2021; provided, however, if our 2021 Annual Meeting of Stockholders is not held between May 20, 2021and July 19, 2021, to be timely, notice by the stockholder must be received not earlier than the 15 th day following the day on which public announcement of the date of the 2021 Annual Meeting of Stockholders is first made. You are also advised to review our Bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count, for the proposal to elect directors, votes "For," "Withhold," and broker non-votes; with respect to the proposal regarding frequency of stockholder advisory votes to approve executive compensation, votes for frequencies of one year, two years or three years, abstentions and broker non-votes; and, with respect to the other proposals, votes "For" and "Against," abstentions and, if applicable, broker non-votes. Abstentions will be counted towards the vote total for each of Proposals 2, 3 and 5 and will have the same effect as "Against" votes. For Proposal 4, abstentions will be counted towards the vote total, and will have the same effect as votes against each of the proposed voting frequencies. Broker non-votes on Proposals 1, 3, 4 and 5 will have no effect and will not be counted towards the vote total for any of those proposals.

What are "broker non-votes"?

As discussed above, when a beneficial owner of shares held in "street name" does not give instructions to the broker, bank or nominee holding the shares as to how to vote on matters deemed to be "non-routine," the broker, bank or nominee cannot vote the shares. These unvoted shares are counted as "broker non-votes." Proposals 1, 3, 4 and 5 are considered to be "non-routine" and we therefore expect broker non-votes to exist in connection with those proposals.

How many votes are needed to approve each proposal?

- For Proposal 1, the election of directors, the two nominees receiving the most "For" votes from the holders of shares present or represented by proxy and entitled to vote on the election of directors will be elected. Only votes "For" or "Withheld" will affect the outcome. Broker non-votes will have no effect.
- To be approved, Proposal 2, approval of the amendment and restatement of our Amended and Restated 2013 Equity Incentive Plan, must receive "For" votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect
- To be approved, Proposal No. 3, advisory approval of the compensation of the Company's named executive officers, will be considered to be approved if it receives "For" votes from the holders of a majority of shares present or represented by proxy and entitled to vote on the matter. If you mark your proxy to "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.
- For Proposal No. 4, the advisory vote on the frequency of stockholder advisory votes on executive compensation, the frequency receiving the votes of the holders of a majority of shares present or represented by proxy and entitled to vote on the matter will be considered to be the frequency preferred by the stockholders. If you mark your proxy to "Abstain" from voting, it will have the same effect as an "Against" vote on each of the proposed voting frequencies. Broker non-votes will have no effect.
- To be approved, Proposal 5, ratification of the selection of Deloitte & Touche LLP as the Company's independent registered public accounting firm for fiscal year ending December 31, 2020, must receive "For" votes from the holders of a majority of shares present or represented by proxy and entitled to vote on the matter. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares entitled to vote are present at the meeting or represented by proxy. On the record date, there were 39,219,134 shares outstanding and entitled to vote. Thus, the holders of 39,219,134 shares must be present or represented by proxy at the meeting to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you virtually attend the Annual Meeting at www.virtualshareholdermeeting.com/NERV2020. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present at the meeting or represented by proxy may adjourn the meeting to another date.

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

Preliminary voting results will be announced 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 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 additional Form 8-K to publish the final results.

PROPOSAL 1

ELECTION OF DIRECTORS

Our Board is divided into three classes. Each class consists, as nearly as possible, of one-third of the total number of directors, and each class has a three-year term. Vacancies on the Board may be filled by persons elected by a majority of the remaining directors. A director elected by the Board to fill a vacancy in a class, including vacancies created by an increase in the number of directors, shall serve for the remainder of the full term of that class and until the director's successor is duly elected and qualified. If, at the time of filling any vacancy, the directors then in office constitute less than a majority of the whole Board, upon application of any stockholder(s) holding at least ten percent of the total number of the shares at the time outstanding having the right to vote for such directors, the Delaware Court of Chancery may order an election be held to fill such vacancies or to replace the directors chosen by the directors then in office.

The Board presently has seven members. There are two directors in the class whose term of office expires on the date of the Annual Meeting. Each of the two nominees listed below is currently a director of the Company. If elected at the Annual Meeting, each of these nominees would serve until the 2023 Annual Meeting and until his successor has been duly elected and qualified, or, if sooner, until the director's death, resignation, or removal. It is the Company's policy to encourage directors and nominees for director to attend the Annual Meeting. All seven of our directors serving at the time of our 2019 Annual Meeting of Stockholders attended that meeting either by teleconference or in person.

Directors are elected by a plurality of the votes of the holders of shares present or represented by proxy and entitled to vote on the election of directors. Shares represented by executed proxies will be voted, if the authority to do so is not withheld, for the election of the two nominees named below. If either nominee becomes unavailable for election as a result of an unexpected occurrence, shares that would have been voted for that nominee will instead be voted for the election of a substitute nominee proposed by the Board. Each nominee has agreed to serve if elected. The Company's management has no reason to believe that either of the nominees will be unable to serve.

The following is a brief biography of each nominee for re-election and each director whose term will continue after the Annual Meeting:

NOMINEES FOR ELECTION FOR A THREE-YEAR TERM EXPIRING AT THE 2023 ANNUAL MEETING

Dr. David Kupfer, age 79, has served on our Board since he was elected by the Board in November 2015. Dr. Kupfer is Distinguished Professor Emeritus of Psychiatry at the University of Pittsburgh School of Medicine, where he chaired that department for 26 years. He also chaired the American Psychiatric Association Task Force for the development of the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders, or DSM-5, which defines the criteria for the diagnosis and classification of mental disorders. Dr. Kupfer received his M.D. from Yale University in 1965. Our Board believes that Dr. Kupfer's extensive experience in the field of psychiatry qualifies him to serve on our Board.

Jan van Heek, age 70, has served on our Board since July 2014. Since 2009, Mr. van Heek has been a Principal and Partner at BioPoint Group, a business development consulting company, where he advises biotechnology and other healthcare companies in commercial strategy development, financing, and business development. He is also currently a board member of Amarin Corporation, a publicly traded biopharmaceutical company. He received an M.B.A. from St. Gallen University in Switzerland and an executive degree from Stanford Business School. Our Board believes that Mr. van Heek's experience in the biotechnology industry and his executive experience, specifically his experience in executive officer positions at other companies in the biotechnology industry, as well as his service on other boards of directors, qualifies him to serve as a member of our Board.

THE BOARD RECOMMENDS A VOTE IN FAVOR OF EACH NAMED NOMINEE.

DIRECTORS CONTINUING IN OFFICE UNTIL THE 2021 ANNUAL MEETING

William F. Doyle, age 57, has served on our Board since December 2017. Mr. Doyle is Executive Chairman of Novocure Ltd., a commercial stage Nasdaq-listed oncology company, where he has served as Chairman of the Board since 2009 and a director since 2004. Since 2004, Mr. Doyle has served as a director of OptiNose, Inc., a Nasdaq-listed specialty pharmaceutical company. From 2015 to 2017, he served on the board of directors of Zoetis Inc., a New York Stock Exchange-listed animal health company. Mr. Doyle is currently the Executive Chairman of BlinkHealth LLC, an online pharmacy and is also the Managing Director of WFD Ventures LLC, a private venture capital firm. Previously, he was a member of Johnson & Johnson's Medical Devices and Diagnostics Group Operating Committee and Vice President, Licensing and Acquisitions. While at Johnson & Johnson, Mr. Doyle was also Chairman of the Medical Devices Research and Development Council, Worldwide President of Biosense-Webster, Inc., and a member of the boards of Cordis Corporation and Johnson & Johnson Development Corporation, Johnson & Johnson's venture capital subsidiary. Earlier he was a management consultant at McKinsey & Company. Mr. Doyle holds an S.B. in materials science and engineering from the Massachusetts Institute of Technology and an M.B.A. from Harvard Business School. Our Board believes Mr. Doyle's experience serving in executive officer positions, service on multiple boards of directors, and extensive knowledge of the industry qualifies him to serve as a member of our Board.

Hans Peter Hasler, age 64, has served on our Board since December 2017. Mr. Hasler is Founder and Chief Executive Officer of Vicarius Pharma AG, a privately held company that provides strategic options to non-European bio-pharma companies bringing late-stage assets to the European market. He is also Senior Advisor at SBTech Global Advisory. His prior experience includes Elan Corporation, where he was Chief Operating Officer, and Biogen, Inc., where his positions included Chief Operating Officer, Executive Vice President, Head of Global Neurology and International. Previously, Mr. Hasler was at Wyeth Pharmaceuticals as Senior Vice President, Chief Marketing Officer and Managing Director of Wyeth Group Germany and General Manager, Wyeth-Lederle Switzerland, Austria and ECE. Mr. Hasler is Chairman of the Board of HBM Healthcare Investments AG in Switzerland. Since September 2018, Mr. Hasler has been a director of Shield Therapeutics, an AIM-listed specialty-pharma company and since June 2009, he has served as a director of HBM Healthcare Investments, an investment company listed on SIX Swiss Exchange. Mr. Hasler holds a Federal Swiss Commercial Diploma and a Marketing Manager Certificate from the Swiss Institute of Business Economy SIB, Zurich, Switzerland. Our Board believes Mr. Hasler's experience helping bring late-stage assets to market, as well as his overall experience in the biotech industry in positions of leadership qualifies him to serve as a member of our Board.

DIRECTORS CONTINUING IN OFFICE UNTIL THE 2022 ANNUAL MEETING

Jeryl Hilleman, age 62, has served on our Board since July 2018. From June 2014 to December 2019, Ms. Hilleman served as Chief Financial Officer of Intersect ENT, Inc., a Nasdaq-listed medical device company. From September 2013 to May 2014, Ms. Hilleman served as Chief Financial Officer and Secretary of Ocera Therapeutics, Inc. ("Ocera"), a biopharmaceutical company, where she was responsible for managing Ocera's financial and accounting operations. From 2012 to 2013, Ms. Hilleman provided independent financial and strategic consulting for biotech and cleantech companies. From January 2008 to May 2012, she served as Chief Financial Officer of Amyris, Inc., a multinational, renewable products company based in California and Brazil, where she was responsible for managing financial and accounting operations. From January 2005, Ms. Hilleman served as a member of the Board of Directors of Xenoport, Inc., a publicly-held biopharmaceutical company, until it was acquired in July 2016. Since July 2018, Ms. Hilleman has served as a director of Novocure Ltd., a commercial stage Nasdaq-listed oncology company. Since December 2019, Ms. Hilleman has served as a director of SI-Bone Inc., a commercial stage Nasdaq-listed joint pain therapy company. Ms. Hilleman holds an A.B. from Brown University and an M.B.A. from the Wharton Graduate School of Business. Our Board believes that Ms. Hilleman's extensive experience in the pharmaceutical industry and as a chief financial officer qualifies her to serve on our Board.

Dr. Fouzia Laghrissi-Thode, age 57, has served on our Board since May 2015. Dr. Laghrissi-Thode has held positions of leadership at AstraZeneca, Roche, Novartis and Sandoz in a broad range of therapeutic areas, including central nervous system, cardiovascular, metabolic disease and genito-urinary health. She is currently Chief Executive Officer and a member of the board of directors of DalCor Pharmaceuticals. Prior to joining DalCor, Dr. Laghrissi-Thode served as U.S. Vice President for the renal-cardio therapy area at AstraZeneca, Head of the South San Francisco site, and the chief executive officer of ZS Pharma, Inc. She was formerly vice president of the cardiovascular and metabolism therapy area at AstraZeneca. Dr. Laghrissi-Thode holds an M.D. from the University of Tours School of Medicine in France, is board certified in psychiatry and was an adjunct professor of psychiatry at the University of Pittsburgh. Our Board believes that Dr. Laghrissi-Thode's extensive experience in the pharmaceutical industry and field of psychiatry qualifies her to serve on our Board.

Dr. Remy Luthringer, age 59, has provided services to us since July 2010, first as a consultant and then as an employee beginning in May 2014. Dr. Luthringer was named our President and Chief Executive Officer in November 2014, and served as President until December 2017. He has served on our Board since November 2014. Dr. Luthringer serves as an advisor to Medicxi Ventures, formerly Index Ventures Life Sciences, and previously served as an advisor to Index Ventures and as Chief Medical Officer to Index Life VI, a biotechnology fund raised by Index Ventures, and serves on the board of directors of a number of private companies. He received his Ph.D. in Pharmacology and Neurosciences from University Louis Pasteur (France). Our Board believes that Dr. Luthringer should serve on our Board due to his extensive knowledge of our business as well as his corporate vision and operational knowledge, which provide strategic guidance to our Board.

INFORMATION REGARDING THE BOARD AND CORPORATE GOVERNANCE

INDEPENDENCE OF THE BOARD

As required under the Nasdaq Stock Market, or Nasdaq, listing standards, a majority of the members of a listed company's board of directors must qualify as "independent," as affirmatively determined by the board of directors. The Board consults with the Company's counsel to ensure that the Board's determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent auditors, the Board has affirmatively determined that the following directors are independent directors within the meaning of the applicable Nasdaq listing standards and our Corporate Governance Guidelines: William F. Doyle, Hans Peter Hasler, Jeryl Hilleman, Dr. David Kupfer, Dr. Fouzia Laghrissi-Thode, and Jan van Heek. In making this determination, the Board found that none of these directors or nominees for director had a material or other disqualifying relationship with the Company. Dr. Luthringer is not considered independent because he is an executive officer of the Company.

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

BOARD LEADERSHIP STRUCTURE

The Company's Board of Directors is currently chaired by the Chief Executive Officer of the Company, Dr. Luthringer. The Board has also appointed Mr. Doyle as lead independent director.

The Company believes that combining the positions of Chief Executive Officer and Board Chair helps to ensure that the Board and management act with a common purpose and provides a single, clear chain of command to execute the Company's strategic initiatives and business plans. In addition, the Company believes that a combined Chief Executive Officer/Board Chair is better positioned to act as a bridge between management and the Board, facilitating the regular flow of information. The Company also believes that it is advantageous to have

a Board Chair with an extensive history with and knowledge of the Company (as is the case with the Company's Chief Executive Officer).

The Board appointed Mr. Doyle as the lead independent director to help reinforce the independence of the Board as a whole. The position of lead independent director has been structured to serve as an effective balance to a combined Chief Executive Officer/Board Chair: the lead independent director is empowered to, among other duties and responsibilities, approve agendas and meeting schedules for regular Board meetings, preside over Board meetings in the absence of the Chair, preside over and establish the agendas for meetings of the independent directors, act as liaison between the Chair and the independent directors, approve information sent to the Board, preside over any portions of Board meetings at which the evaluation or compensation of the Chief Executive Officer is presented or discussed and, as appropriate upon request, act as a liaison to shareholders. In addition, it is the responsibility of the lead independent director to coordinate between the Board and management with regard to the determination and implementation of responses to any problematic risk management issues. As a result, the Company believes that the lead independent director can help ensure the effective independent functioning of the Board in its oversight responsibilities. In addition, the Company believes that the lead independent director is better positioned to build a consensus among directors and to serve as a conduit between the other independent directors and the Board Chair, for example, by facilitating the inclusion on meeting agendas of matters of concern to the independent directors. In light of the Chief Executive Officer's extensive history with and knowledge of the Company, and because the Board's lead independent director is empowered to play a significant role in the Board's leadership and in reinforcing the independence of the Board, the Company believes that it is advantageous for the Company to combine the positions of Chief Executive Officer and Board Chair.

ROLE OF THE BOARD IN RISK OVERSIGHT

One of the Board's key functions is informed oversight of our risk management process. The Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various standing Board committees that address risks inherent in their respective areas of oversight. In particular, our Board is responsible for monitoring and assessing strategic risk exposure, including a determination of the nature and level of risk appropriate for us. Regarding the coronavirus pandemic (COVID-19), our management is focused on addressing the concerns of our employees and matters related to our business, as well as updating and communicating with the full Board regularly. The full Board has oversight and has been engaged concerning the monitoring and identification of risks to the Company, and actions we are taking to mitigate risks related to this pandemic.

Our Audit Committee has the responsibility to review and discuss with management, as appropriate, our guidelines and policies with respect to risk assessment and risk management, including our major financial risk exposures and the steps taken by management to monitor and control these exposures. Our Nominating and Corporate Governance Committee is responsible for developing our corporate governance principles, and periodically reviews these principles and their application. Our Compensation Committee reviews our practices and policies of employee compensation as they relate to risk management and risk-taking incentives, to determine whether such compensation policies and practices are reasonably likely to have a material adverse effect on us.

PROHIBITIONS ON HEDGING, PLEDGING AND SPECULATIVE TRANSACTIONS

Under the terms of our insider trading policy, our officers and directors are prohibited from short-selling our securities and are prohibited from holding our securities in a margin account. In addition, none of our directors or officers may pledge our securities as collateral for a loan, or buy or sell puts, calls, other derivative securities of the Company or any derivative securities that provide the economic equivalent of ownership of any of the Company's securities or an opportunity, direct or indirect, to profit from any change in the value of the Company's securities, at any time without the approval of the Audit Committee.

MEETINGS OF THE BOARD

The Board met six times during the last fiscal year. Each Board member attended 75% or more of the aggregate number of meetings of the Board and of the committees on which he or she served, held during the portion of the last fiscal year for which he or she was a director or committee member.

INFORMATION REGARDING COMMITTEES OF THE BOARD

The Board has three committees: an Audit Committee, a Compensation Committee, and a Nominating and Corporate Governance Committee. The following table provides membership and meeting information for the fiscal year ended December 31, 2019 for each of the Board committees:

Nama	A 12.		Nominating and Corporate
Name	<u>Audit</u>	Compensation	Governance
Name William F. Doyle	X	X*	
Hans Peter Hasler		X	X
Jeryl Hilleman	X*		
Dr. David Kupfer			X*
Dr. Fouzia Laghrissi-Thode		X	
Dr. Remy Luthringer			
Jan van Heek	X		
Total meetings in 2019 fiscal year	4	3	1

^{*} Committee Chairperson

Below is a description of each committee of the Board.

Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. The Board has determined that each member of each committee meets the applicable Nasdaq rules and regulations regarding "independence," and each member is free of any relationship that would impair his or her individual exercise of independent judgment with regard to the Company.

Audit Committee

The Audit Committee of the Board was established by the Board in accordance with Section 3(a)(58)(A) of the Exchange Act to oversee the Company's corporate accounting and financial reporting processes and audits of its financial statements. For this purpose, the Audit Committee performs several functions. The Audit Committee evaluates the performance of and assesses the qualifications of the independent registered public accounting firm; determines and approves the engagement of the independent registered public accounting firm or to appoint and engage a new independent registered public accounting firm; reviews and approves the retention of the independent registered public accounting firm to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent registered public accounting firm on the Company's audit engagement team as required by law; reviews and approves or rejects transactions between the Company and any related persons; confers with management regarding the effectiveness of internal controls over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; and meets to review the Company's annual audited consolidated financial statements and quarterly unaudited consolidated financial statements with management and the independent registered public accounting firm. In 2019, the Audit Committee met four times.

The Audit Committee is currently composed of three directors: Ms. Hilleman (Chair), Mr. Doyle and Mr. van Heek. The Board has adopted a written Audit Committee charter that is available on the Company's website at http://ir.minervaneurosciences.com/corporate-governance.

The Board reviews the Nasdaq listing standards definition of independence for Audit Committee members on an annual basis and has determined that Ms. Hilleman and Messrs. Doyle and van Heek are independent (as independence is currently defined in Rule 5605(c)(2)(A) of the Nasdaq listing standards).

The Board has also determined that each of Ms. Hilleman and Mr. van Heek qualify as "audit committee financial experts," as defined in applicable SEC rules. The Board made a qualitative assessment of each of Ms. Hilleman's and Mr. van Heek's level of knowledge and experience based on a number of factors, including their formal education and experience serving on audit committees for public reporting companies. The Board has also determined that each of the Audit Committee members is able to read and understand fundamental financial statements.

Report of the Audit Committee of the Board (1)

The Audit Committee has reviewed and discussed the audited consolidated financial statements for the fiscal year ended December 31, 2019 with the management of the Company. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by Auditing Standard No. 16, *Communications with Audit Committees*, as adopted by the Public Company Accounting Oversight Board, or PCAOB. The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent registered public accounting firm's communications with the Audit Committee concerning independence and has discussed with the independent registered public accounting firm the accounting firm's independence. Based on the foregoing, the Audit Committee recommended to the Board that the audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Respectfully submitted,
The Audit Committee of the Board of Directors

Ms. Jeryl Hilleman, Chair Mr. William F. Doyle Mr. Jan van Heek

⁽¹⁾ The material in this report is not "soliciting material," is not deemed "filed" with the Commission and is not to be incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Compensation Committee

The Compensation Committee is composed of three directors: Mr. Doyle (Chair), Mr. Hasler and Dr. Laghrissi-Thode. All members of the Company's Compensation Committee are independent (as independence is currently defined in Rule 5605(d)(2)(A) of the Nasdaq listing standards). The Board has adopted a written Compensation Committee charter that is available on the Company's website at http://ir.minervaneurosciences.com/corporate-governance.

The Compensation Committee of the Board acts on behalf of the Board to review, adopt, and oversee the Company's compensation strategy, policies, plans and programs, including: to establish corporate and individual performance objectives relevant to the compensation of the Company's executive officers; to review and approve of the compensation and other terms of employment of the Company's Chief Executive Officer and other executive officers; to review and adopt or make recommendations to the Board in respect of any employment agreements or severance or change-in-control arrangements for the Company's Chief Executive Officer and other executive officers; to administer the Company's incentive and equity-based compensation plans; to review and recommend to the Board a succession plan for the Company's Chief Executive Officer and other executive officers; and to review the compensation of the Company's non-employee directors and recommend any proposed changes to the Board.

In addition, the Board has also determined that each member of the Compensation Committee is a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act and an "outside director" as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, as amended.

Compensation Committee Processes and Procedures

Typically, the Compensation Committee meets at least twice annually, and with greater frequency if necessary. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in consultation with the Chief Executive Officer and the Chief Financial Officer. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice, or to otherwise participate in Compensation Committee meetings. The Chief Executive Officer may not participate in, or be present during, any deliberations or determinations of the Compensation Committee regarding his compensation. The Compensation Committee has full access to all books, records, facilities, and personnel of the Company. In addition, under its charter, the Compensation Committee has the authority to obtain, at the expense of the Company, advice and assistance from internal and external legal, accounting, or other advisors and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. The Compensation Committee has direct responsibility for the oversight of the work of any advisors engaged for the purpose of advising the Committee. In particular, the Compensation Committee has the sole authority to retain compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms. Under its charter, the Compensation Committee may select, or receive advice from, a compensation consultant, legal counsel, or other advisor to the compensation committee, other than in-house legal counsel and certain other types of advisors, only after taking into consideration six factors, prescribed by the SEC and Nasdaq, that bear upon the advisor's

During the past fiscal year, after taking into consideration the six factors prescribed by the SEC and Nasdaq, the Compensation Committee engaged Radford as compensation consultant. The Compensation Committee requested that Radford:

evaluate the efficacy of and assist in refining the Company's overall compensation philosophy and practices, including as related to base
pay, bonus percentage, and the Company's equity incentive and long-term incentive plans, to support and reinforce the Company's longterm strategic goals; and

review executive and outside director compensation in comparison to peer data and best market practices.

As part of its engagement, Radford reviewed a peer group of publicly traded companies in the life sciences industry at a stage of development, market capitalization, and size comparable to ours, which companies the Compensation Committee believed were generally comparable to our Company and against which the Compensation Committee believed we competed for executive talent. At the request of the Compensation Committee, Radford also conducted individual interviews with members of the Compensation Committee and senior management to learn more about the Company's business operations and strategy, key performance metrics and strategic goals, as well as the markets in which the Company competes. Radford ultimately developed broad based recommendations using benchmarks that were presented to the Compensation Committee for its consideration.

In 2014, the Board formed a Non-Senior Officer Stock Option Subcommittee, or the Subcommittee, composed of the Chief Executive Officer, to which it delegated authority to grant, without any further action required by the Board or the Compensation Committee, stock options to newly hired individuals who carry titles lower than vice president, up to a defined number of shares depending on the title of the employee. In May 2015, the Board approved an amended and restated policy for delegating authority for grants of equity awards to newly hired individuals. Under the amended and restated policy, the Subcommittee, currently composed of Dr. Luthringer, may now grant stock options to newly hired individuals who carry titles lower than senior vice president, within a designated range of shares depending on the title of the employee. The purpose of this delegation of authority is to facilitate the timely grant of options to new non-senior management employees within specified limits approved by the Board. During the fiscal year ended December 31, 2019, the Subcommittee did not exercise its authority to grant options to any new non-senior officer employees.

Historically, the Compensation Committee has made most of the significant adjustments to annual compensation, determined bonus and equity awards and established new performance objectives at one or more meetings held during the first quarter of the year. However, the Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, adjustments to the compensation of existing executives, as well as high-level strategic issues, such as the efficacy of the Company's compensation strategy, potential modifications to that strategy, and new trends, plans or approaches to compensation, at various meetings throughout the year. Generally, the Compensation Committee's process comprises two related elements: the determination of compensation levels and the establishment of performance objectives for the current year. For executives other than the Chief Executive Officer, the Compensation Committee solicits and considers evaluations and recommendations submitted by the Chief Executive Officer for the Compensation Committee's approval. In the case of the Chief Executive Officer, the evaluation of his performance is conducted by the Compensation Committee in consultation with the Board, which determines any adjustments to his compensation as well as equity awards to be granted. Some of the key factors the Compensation Committee considers in making pay decisions are as follows: historical compensation levels, relative position to the market, internal equity, individual and Company performance, strategic importance of role, and retention risk, among others. In 2019, the Compensation Committee met three times and acted two times via Unanimous Written Consent.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee of the Board is responsible for identifying candidates qualified to serve as directors of the Company (consistent with criteria approved by the Board), recommending to the Board candidates for election as directors and the composition of each of the committees of the Board, overseeing the evaluation of the Board and its committees, and developing the Company's corporate governance policies. In 2019, the Nominating and Corporate Governance Committee met once.

The Nominating and Corporate Governance Committee is composed of two directors: Dr. Kupfer (Chair) and Mr. Hasler. All members of the Nominating and Corporate Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards). The Board has adopted a written Nominating and Corporate Governance Committee charter that is available to stockholders on the Company's website at http://ir.minervaneurosciences.com/corporate-governance.

The Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements, being over 21 years of age, and having the highest personal integrity and ethics. The Nominating and Corporate Governance Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, sufficient time to devote to the affairs of the Company, demonstrated excellence in his or her field, the ability to exercise sound business judgment, and the commitment to rigorously represent the long-term interests of the Company's stockholders. However, the Nominating and Corporate Governance Committee retains the right to modify these qualifications from time to time. Candidates for director nominees are reviewed in the context of the current composition of the Board, the operating requirements of the Company and the long-term interests of stockholders. In conducting this assessment, the Nominating and Corporate Governance Committee typically considers diversity, age, skills and such other factors as it deems appropriate, given the current needs of the Board and the Company, to maintain a balance of knowledge, experience, and capability. In the case of incumbent directors whose terms of office are set to expire, the Nominating and Corporate Governance Committee reviews these directors' overall service to the Company during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors' independence. In the case of new director candidates, the Nominating and Corporate Governance Committee also determines whether the nominee is independent for Nasdaq purposes, based upon applicable Nasdaq listing standards, applicable SEC rules and regulations, and the advice of counsel, if necessary. The Nominating and Corporate Governance Committee may engage, if it deems appropriate, a professional search firm to identify qualified director candidates. The Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board.

The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders. The Nominating and Corporate Governance Committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above, based on whether or not the candidate was recommended by a stockholder. Stockholders who wish to recommend individuals for consideration by the Nominating and Corporate Governance Committee to become nominees for election to the Board may do so by delivering a written recommendation addressed to our Corporate Secretary at 1601 Trapelo Road, Suite 286, Waltham, MA 02451.

STOCKHOLDER COMMUNICATIONS WITH THE BOARD

While the Company has not established a formal policy for stockholder communications with the Board, stockholders who wish to communicate with the Board may do so by sending written communications addressed to the Corporate Secretary of the Company at Minerva Neurosciences, Inc., 1601 Trapelo Road, Suite 286, Waltham, MA 02451.

These communications may be reviewed by one or more employees of the Company designated by the Board, who will determine whether the communication should be presented to the Board. The purpose of this screening is to allow the Board to avoid having to consider irrelevant or inappropriate communications (such as advertisements, solicitations and hostile communications). All communications directed to the Audit Committee in accordance with the Company's Whistleblower Policy that relate to questionable accounting or auditing matters involving the Company will be promptly and directly forwarded to the Audit Committee.

CODE OF ETHICS

The Company has adopted a Code of Business Conduct and Ethics, or the Code of Ethics, which applies to all officers, directors, and employees. The Code of Ethics is available on the Company's website at http://ir.minervaneurosciences.com/corporate-governance. If the Company makes any substantive amendments to the Code of Ethics or grants any waiver from a provision of the Code of Ethics to any executive officer or director, the Company will promptly disclose the nature of the amendment or waiver on its website.

PROPOSAL 2: APPROVAL OF THE AMENDED AND RESTATED 2013 EQUITY INCENTIVE PLAN

In April 2020, our Board approved an amendment and restatement of the Minerva Neurosciences, Inc. Amended and Restated 2013 Equity Incentive Plan, or the 2013 Plan, subject to stockholder approval. We refer to the 2013 Plan, as amended and restated by the Board in April 2020, as the Restated 2013 Plan throughout this proxy statement.

The Restated 2013 Plan contains the following material changes from the 2013 Plan:

- Subject to adjustment for certain changes in our capitalization, the aggregate number of shares of our common stock that may be issued under the Restated 2013 Plan will not will not exceed the sum of (i) 2,000,000 new shares, (ii) the number of shares remaining available for the grant of new awards under the 2013 Plan as of immediately prior to the effective date of the Restated 2013 Plan (245,353 shares remained available as of April 17, 2020) and (iii) the number of shares of our common stock subject to outstanding awards granted under the 2013 Plan that on or following the effective date of the Restated 2013 Plan: (a) are not issued because such award or any portion thereof expires or otherwise terminates without all of the shares covered by such award having been issued; (b) are not issued because such award or any portion thereof is settled in cash; or (c) are forfeited back to or repurchased by us because of the failure to meet a contingency or condition required for the vesting of such shares.
- The Restated 2013 Plan contains the following limitations on our ability to recycle shares: (i) shares that are reacquired or withheld (or not issued) by us to satisfy the exercise or purchase price of an award will not become available again for issuance; (ii) shares that are reacquired or withheld (or not issued) by us to satisfy a tax withholding obligation in connection with an award will not become available again for issuance; and (iii) any shares repurchased by us on the open market with the proceeds of the exercise or purchase price of awards will not become available again for issuance. The 2013 Plan does not contain any such limitations on share recycling.
- No award granted following the date stockholders approve the Restated 2013 Plan may vest until at least 12 months following the date of grant of the award, except that (i) the shares of our common stock up to 5% of the share reserve of the Restated 2013 Plan may be issued pursuant to awards granted under the Restated 2013 Plan that do not meet the minimum vesting requirements, (ii) awards may be granted as substitute awards in replacement of other awards that were scheduled to vest within the 12-month period following the grant date, (iii) awards may be granted in connection with an elective deferral of cash compensation that, absent a deferral election, otherwise would have been paid to the grantee within the 12-month period following the grant date, (iv) the vesting of awards may accelerate within 12 months following the grant date in connection with a change in control, and (v) the Board retains the discretionary authority to accelerate the vesting of awards granted under the Restated 2013 Plan. The 2013 Plan does not contain any such minimum vesting requirements.
- Under the Restated 2013 Plan, the aggregate value of all compensation granted or paid by us to any individual for service as a non-employee director with respect to any calendar year (such period, the "annual period"), including awards granted under the Restated 2013 Plan and cash fees paid to such non-employee director, will not exceed (i) \$500,000 in total value or (ii) in the event such non-employee director is first appointed or elected to the Board during such annual period, \$750,000 in total value. For purposes of these limitations, the value of any equity awards is calculated based on the grant date fair value of such awards for financial reporting purposes. The 2013 Plan does not contain such limitations on non-employee director compensation.
- The Restated 2013 Plan provides that (i) no dividends or dividend equivalents may be paid with respect to any shares of our common stock subject to an award before the date such shares have vested, (ii) any dividends or dividend equivalents that are credited with respect to any such shares will be subject to all of the terms and conditions applicable to such shares under the terms of the applicable award agreement (including any vesting conditions), and (iii) any dividends or dividend equivalents that are credited with respect to any such shares will be forfeited to us on the date such shares are forfeited to or

- repurchased by us due to a failure to vest. The 2013 Plan does not contain any such restrictions on dividends or dividend equivalents.
- The change in control definition in the Restated 2013 Plan is not a "liberal" definition. A change in control transaction must actually occur in order for the change in control provisions in the Restated 2013 Plan to be triggered. The 2013 Plan's definition of change in control, on the other hand, includes the ability to provide a separate definition of change in control in award agreements or in any other agreements incorporated by reference into the award agreements for purposes of defining such term.

Why We Are Asking Our Stockholders to Approve the Restated 2013 Plan

Currently, we maintain the 2013 Plan to grant equity awards to our employees, non-employee directors and consultants. We are seeking stockholder approval of the Restated 2013 Plan primarily to increase the number of shares available for the grant of stock options, restricted stock unit awards and other awards, which will enable us to have a competitive equity incentive program to compete with our peer group for key talent. If the Restated 2013 Plan is approved by our stockholders, no additional awards will be granted under the current terms of the 2013 Plan.

Approval of the Restated 2013 Plan by our stockholders will allow us to grant stock options, restricted stock unit awards and other awards at levels determined appropriate by the Board or Compensation Committee. The Restated 2013 Plan will also allow us to continue to utilize a broad array of equity incentives in order to secure and retain the services of our employees, non-employee directors and consultants, and to continue providing long-term incentives that align the interests of our employees, non-employee directors and consultants with the interests of our stockholders.

Requested Shares

If this Proposal 2 is approved by our stockholders, then subject to adjustment for certain changes in our capitalization, the aggregate number of shares of our common stock that may be issued under the Restated 2013 Plan will not exceed the sum of (i) 2,000,000 new shares, (ii) the number of shares remaining available for the grant of new awards under 2013 Plan as of immediately prior to the effective date of the Restated 2013 Plan, and (iii) certain shares subject to outstanding awards granted under the 2013 Plan that may become available for issuance under the Restated 2013 Plan, as such shares become available from time to time (as further described below in "Description of the Restated 2013 Plan—Shares Available for Awards").

Stockholder Approval

If this Proposal 2 is approved by our stockholders, the Restated 2013 Plan will become effective as of the date of the Annual Meeting and no additional awards will be granted under the current terms of the 2013 Plan. In the event that our stockholders do not approve this Proposal 2, the Restated 2013 Plan will not become effective and the 2013 Plan will continue to be effective in accordance with its current terms.

Why You Should Vote to Approve the Restated 2013 Plan

Equity Awards Are an Important Part of Our Compensation Philosophy

The Board believes that the grant of equity awards is a key element underlying our ability to attract, retain and motivate our employees, non-employee directors and consultants because of the strong competition for highly trained and experienced individuals among biopharmaceutical companies. Therefore, the Board believes that the Restated 2013 Plan is in the best interests of our business and our stockholders and recommends a vote in favor of this Proposal 2.

The Restated 2013 Plan will allow us to continue to utilize equity awards as long-term incentives to secure and retain the services of our employees, non-employee directors and consultants, consistent with our

compensation philosophy and common compensation practice for our industry. To date, equity awards have been a key aspect of our program to attract and retain key employees, non-employee directors and consultants. We believe the use of equity awards strongly aligns the interests of our employees with those of our stockholders by placing a considerable proportion of our employees' total compensation "at risk" because it is contingent on the appreciation in value of our common stock. In addition, we believe equity awards encourage employee ownership of our common stock and promote retention through the reward of long-term Company performance.

We Carefully Manage the Use of Equity Awards

Our compensation philosophy reflects broad-based eligibility for equity awards, and we have historically granted awards to substantially all of our employees. However, we recognize that equity awards dilute existing stockholders, and, therefore, we are mindful to responsibly manage the growth of our equity compensation program. We are committed to effectively monitoring our equity compensation share reserve, including our "burn rate," to ensure that we maximize stockholders' value by granting the appropriate number of equity awards necessary to attract, reward, and retain employees, non-employee directors and consultants.

The Restated 2013 Plan Combines Compensation and Governance Best Practices

The Restated 2013 Plan includes provisions that are designed to protect our stockholders' interests and to reflect corporate governance best practices, including:

- Stockholder approval is required for additional shares. The Restated 2013 Plan does not contain an annual "evergreen" provision. The Restated 2013 Plan authorizes a fixed number of shares, so that stockholder approval is required to issue any additional shares.
- *No liberal share recycling*. The following shares will not become available again for issuance under the Restated 2013 Plan: (i) shares that are reacquired or withheld (or not issued) by us to satisfy the exercise or purchase price of an award; (ii) shares that are reacquired or withheld (or not issued) by us to satisfy a tax withholding obligation in connection with an award; and (iii) any shares repurchased by us on the open market with the proceeds of the exercise or purchase price of awards.
- Repricing is not allowed. The Restated 2013 Plan prohibits the repricing of outstanding stock options and stock appreciation rights, and the cancellation of any outstanding stock options or stock appreciation rights that have an exercise or strike price greater than the then-current fair market value of our common stock in exchange for cash or other stock awards under the Restated 2013 Plan, without prior stockholder approval.
- *No discounted stock options or stock appreciation rights* . All stock options and stock appreciation rights granted under the Restated 2013 Plan must have an exercise price equal to or greater than the fair market value of our common stock on the date the stock option or stock appreciation right is granted.
- *Minimum Vesting Requirement.* No award granted following the date stockholders approve the Restated 2013 Plan may vest until at least 12 months following the date of grant of the award, except that (i) the shares of our common stock up to 5% of the share reserve of the Restated 2013 Plan may be issued pursuant to awards granted under the Restated 2013 Plan that do not meet the minimum vesting requirements, (ii) awards may be granted as substitute awards in replacement of other awards that were scheduled to vest within the 12-month period following the grant date, (iii) awards may be granted in connection with an elective deferral of cash compensation that, absent a deferral election, otherwise would have been paid to the grantee within the 12-month period following the grant date, (iv) the vesting of awards may accelerate within 12 months following the grant date in connection with a change in control, and (v) the Board retains the discretionary authority to accelerate the vesting of awards granted under the Restated 2013 Plan.
- *Limit on non-employee director compensation* . The aggregate value of all compensation granted or paid by us to any individual for service as a non-employee director with respect to any annual period,

including awards granted under the Restated 2013 Plan and cash fees paid to such non-employee director, will not exceed (i) \$500,000 in total value or (ii) in the event such non-employee director is first appointed or elected to the Board during such annual period, \$750,000 in total value. For purposes of these limitations, the value of any equity awards is calculated based on the grant date fair value of such awards for financial reporting purposes.

- Restrictions on dividends and dividend equivalents. The Restated 2013 Plan provides that (i) no dividends or dividend equivalents may be paid with respect to any shares of our common stock subject to an award before the date such shares have vested, (ii) any dividends or dividend equivalents that are credited with respect to any such shares will be subject to all of the terms and conditions applicable to such shares under the terms of the applicable award agreement (including any vesting conditions), and (iii) any dividends or dividend equivalents that are credited with respect to any such shares will be forfeited to us on the date such shares are forfeited to or repurchased by us due to a failure to vest.
- Awards subject to forfeiture/clawback. Awards granted under the Restated 2013 Plan will be subject to recoupment in accordance with any clawback policy that we are required to adopt pursuant to the listing standards of any national securities exchange or association on which our securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law, and any other clawback policy that the Company adopts. In addition, the Board may impose other clawback, recovery or recoupment provisions in an award agreement, including a reacquisition right in respect of previously acquired shares or other cash or property upon the occurrence of cause.
- Termination of stock options and stock appreciation rights on a participant's termination for cause. If a participant's service is terminated for cause, which is defined under the Restated 2013 Plan as (i) the participant's attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (ii) the participant's intentional, material violation of any contract or agreement between the participant and the Company or of any statutory duty owed to the Company; (iii) the participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; or (iv) the participant's gross misconduct, the participant's stock options and stock appreciation rights terminate immediately, and the participant is prohibited from exercising his or her stock options and stock appreciation rights.
- *No liberal change in control definition*. The change in control definition in the Restated 2013 Plan is not a "liberal" definition. A change in control transaction must actually occur in order for the change in control provisions in the Restated 2013 Plan to be triggered.
- *No accelerated vesting of assumed awards upon change in control*. The Restated 2013 Plan does not provide for accelerated vesting of awards that are assumed by an acquirer upon a change in control.
- Material amendments require stockholder approval. Consistent with Nasdaq rules, the Restated 2013 Plan requires stockholder approval
 of any material revisions to the Restated 2013 Plan. In addition, certain other amendments to the Restated 2013 Plan require stockholder
 approval.

Vote Required

At the Annual Meeting, the stockholders are being asked to approve the Restated 2013 Plan. The affirmative vote of the holders of a majority of the shares represented in person or by proxy at the Annual Meeting and entitled to vote on the item will be required to approve the Restated 2013 Plan. **The Board of Directors recommends voting "FOR" the approval of the Restated 2013 Plan.**

Description of the Restated 2013 Plan

The material features of the Restated 2013 Plan are described below. The following description of the Restated 2013 Plan is a summary only and is qualified in its entirety by reference to the complete text of the

Restated 2013 Plan. Stockholders are urged to read the actual text of the Restated 2013 Plan in its entirety, which is attached to this proxy statement as Appendix A.

Purpose

The Restated 2013 Plan is designed to secure and retain the services of our employees, non-employee directors and consultants, to provide incentives for such persons to exert maximum efforts for the success of the Company and our affiliates, and to provide a means by which such persons may be given an opportunity to benefit from increases in the value of our common stock. The Restated 2013 Plan is also designed to align employees' interests with stockholder interests.

Successor to and Continuation of the 2013 Plan

The Restated 2013 Plan is intended to be the successor to and a continuation of the 2013 Plan. If the Restated 2013 Plan is approved by our stockholders, no additional awards will be granted under the current terms of the 2013 Plan. If the Restated 2013 Plan is not approved by our stockholders, the Restated 2013 Plan will not become effective and the 2013 Plan will continue to be effective in accordance with its current terms.

Types of Awards

The terms of the Restated 2013 Plan provide for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards, and other awards.

Shares Available for Awards

Subject to adjustment for certain changes in our capitalization, the aggregate number of shares of our common stock that may be issued under the Restated 2013 Plan will not exceed the sum of (i) 2,000,000 new shares, (ii) the number of shares remaining available for the grant of new awards under the 2013 Plan as of immediately prior to the effective date of the Restated 2013 Plan and (iii) the Returning Shares (as defined below), as such shares become available from time to time.

The "Returning Shares" are shares of our common stock subject to outstanding awards granted under the 2013 Plan that on or following the effective date of the Restated 2013 Plan: (i) are not issued because such award or any portion thereof expires or otherwise terminates without all of the shares covered by such award having been issued; (ii) are not issued because such award or any portion thereof is settled in cash; or (iii) are forfeited back to or repurchased by us because of the failure to meet a contingency or condition required for the vesting of such shares.

The following actions will not result in an issuance of shares of our common stock under the Restated 2013 Plan and accordingly will not reduce the number of shares of our common stock available for issuance under the Restated 2013 Plan: (i) the expiration or termination of any portion of an award granted under the Restated 2013 Plan without the shares covered by such portion of the award having been issued or (ii) the settlement of any portion of an award granted under the Restated 2013 Plan in cash. If any shares of our common stock issued pursuant to an award granted under the Restated 2013 Plan are forfeited back to or repurchased by us because of the failure to meet a contingency or condition required for the vesting of such shares or if any shares, then such shares will also become available again for issuance under the Restated 2013 Plan.

Any shares of our common stock reacquired or withheld (or not issued) by us to satisfy the exercise or purchase price of an award will no longer be available for issuance under the Restated 2013 Plan, including any shares subject to an award that are not delivered to a participant because such award is settled through a reduction of shares subject to such award. In addition, any shares reacquired or withheld (or not issued) by us to

satisfy a tax withholding obligation in connection with an award, or any shares repurchased by us on the open market with the proceeds from the exercise or purchase price of an award will no longer be available for issuance under the Restated 2013 Plan.

The closing price of our common stock, as reported on Nasdaq Global Market on April 17, 2020, was \$6.88 per share.

Eligibility

All of our (including our affiliates') employees, non-employee directors and consultants are eligible to participate in the Restated 2013 Plan and may receive all types of awards other than incentive stock options. Incentive stock options may be granted under the Restated 2013 Plan only to our (including our affiliates') employees.

As of April 17, 2020, we (including our affiliates) had approximately 13 employees, six non-employee directors and one consultant.

Administration

The Restated 2013 Plan will be administered by our Board, which may in turn delegate some or all of the administration of the Restated 2013 Plan to a committee or committees composed of members of the Board. Our Board has delegated concurrent authority to administer the Restated 2013 Plan to our Compensation Committee, but may, at any time, revest in itself some or all of the power delegated to our Compensation Committee. Our Board and Compensation Committee are each considered to be a Plan Administrator for purpose of this Proposal 2.

Subject to the terms of the Restated 2013 Plan, the Plan Administrator may determine the recipients, the types of awards to be granted, the number of shares of our common stock subject to or the cash value of awards, and subject to the limitations set forth below, the terms and conditions of awards granted under the Restated 2013 Plan, including the period of their exercisability and vesting. The Plan Administrator also has the authority to provide for accelerated exercisability and vesting of awards. Subject to the limitations set forth below, the Plan Administrator also determines the fair market value applicable to an award and the exercise or strike price of stock options and stock appreciation rights granted under the Restated 2013 Plan.

The Plan Administrator may also delegate to one or more executive officers the authority to designate employees who are not executive officers to be recipients of certain awards and the number of shares of our common stock subject to such awards. Under any such delegation, the Plan Administrator will specify the total number of shares of our common stock that may be subject to the awards granted by such executive officer. The executive officer may not grant an award to himself or herself.

Repricing; Cancellation and Re-Grant of Stock Options or Stock Appreciation Rights

Under the Restated 2013 Plan, unless our stockholders have approved such an action within 12 months prior to such an event, the Plan Administrator does not have the authority to reprice any outstanding stock option or stock appreciation right by (1) reducing the exercise or strike price of the stock option or stock appreciation right or (2) canceling any outstanding stock option or stock appreciation right that has an exercise or strike price greater than the then-current fair market value of our common stock in exchange for cash or other awards.

Minimum Vesting Requirements

No award granted following the date stockholders approve the Restated 2013 Plan may vest until at least 12 months following the date of grant of the award, except that (i) the shares of our common stock up to 5% of the

share reserve of the Restated 2013 Plan may be issued pursuant to awards granted under the Restated 2013 Plan that do not meet the minimum vesting requirements, (ii) awards may be granted as substitute awards in replacement of other awards that were scheduled to vest within the 12-month period following the grant date, (iii) awards may be granted in connection with an elective deferral of cash compensation that, absent a deferral election, otherwise would have been paid to the grantee within the 12-month period following the grant date, (iv) the vesting of awards may accelerate within 12 months following the grant date in connection with a change in control under the Restated 2013 Plan, and (v) the Board retains the discretionary authority to accelerate the vesting of awards granted under the Restated 2013 Plan.

Dividends and Dividend Equivalents

The Restated 2013 Plan provides that (i) no dividends or dividend equivalents may be paid with respect to any shares of our common stock subject to an award before the date such shares have vested, (ii) any dividends or dividend equivalents that are credited with respect to any such shares will be subject to all of the terms and conditions applicable to such shares under the terms of the applicable award agreement (including any vesting conditions), and (iii) any dividends or dividend equivalents that are credited with respect to any such shares will be forfeited to us on the date such shares are forfeited to or repurchased by us due to a failure to vest. Subject to the foregoing, the Restated 2013 Plan further provides that dividends or dividend equivalents may be paid or credited to shares of our common stock subject to a restricted stock award or restricted stock unit award granted under the Restated 2013 Plan, as determined by the Plan Administrator and specified in the applicable award agreement.

Limit on Non-Employee Director Compensation

The aggregate value of all compensation granted or paid by us to any individual for service as a non-employee director with respect to any calendar year (such period, the "annual period"), including awards granted under the Restated 2013 Plan and cash fees paid to such non-employee director, will not exceed (i) \$500,000 in total value or (ii) in the event such non-employee director is first appointed or elected to the Board during such annual period, \$750,000 in total value. For purposes of these limitations, the value of any equity awards is calculated based on the grant date fair value of such awards for financial reporting purposes.

Stock Options

Stock options may be granted under the Restated 2013 Plan pursuant to stock option agreements. The Restated 2013 Plan permits the grant of stock options that are intended to qualify as incentive stock options, or ISOs, and nonstatutory stock options, or NSOs.

The exercise price of a stock option granted under the Restated 2013 Plan may not be less than 100% of the fair market value of the common stock subject to the stock option on the date of grant and, in some cases (see "—Limitations on Incentive Stock Options" below), may not be less than 110% of such fair market value.

The term of stock options granted under the Restated 2013 Plan may not exceed ten years from the date of grant and, in some cases (see "— Limitations on Incentive Stock Options" below), may not exceed five years from the date of grant. Except as otherwise provided in a participant's stock option agreement or other written agreement with us or one of our affiliates, if a participant's service relationship with us or any of our affiliates (referred to in this Proposal 2 as "continuous service") terminates (other than for cause (as defined in the Restated 2013 Plan) or the participant's death or disability (as defined in the Restated 2013 Plan)), the participant may exercise any vested stock options for up to three months following the participant's termination of continuous service. Except as otherwise provided in a participant's stock option agreement or other written agreement with us or one of our affiliates, if a participant's continuous service terminates due to the participant's disability, the participant may exercise any vested stock options for up to 12 months following the participant's termination due to the participant's disability. Except as otherwise provided in a participant's stock option

agreement or other written agreement with us or one of our affiliates, if a participant's continuous service terminates due to the participant's death (or the participant dies within a specified period following termination of continuous service), the participant's beneficiary may exercise any vested stock options for up to 18 months following the participant's death. Except as explicitly provided otherwise in a participant's stock option agreement or other written agreement with us or one of our affiliates, if a participant's continuous service is terminated for cause, all stock options held by the participant will terminate upon the participant's termination of continuous service and the participant will be prohibited from exercising any stock option from and after such termination date. Except as otherwise provided in a participant's stock option agreement or other written agreement with us or one of our affiliates, the term of a stock option may be extended if a participant's continuous service terminates for any reason other than for cause and, at any time during the last 30 days of the applicable post-termination exercise period, the exercise of the stock option would be prohibited by applicable laws or the sale of any common stock received upon such exercise would violate our insider trading policy. In no event, however, may a stock option be exercised after its original expiration date.

Acceptable forms of consideration for the purchase of our common stock pursuant to the exercise of a stock option under the Restated 2013 Plan will be determined by the Plan Administrator and may include payment: (i) by cash, check, bank draft or money order payable to us; (ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board; (iii) by delivery to us of shares of our common stock (either by actual delivery or attestation); (iv) by a net exercise arrangement (for NSOs only); or (v) in other legal consideration approved by the Plan Administrator.

Stock options granted under the Restated 2013 Plan may become exercisable in cumulative increments, or "vest," as determined by the Plan Administrator at the rate specified in the stock option agreement. Shares covered by different stock options granted under the Restated 2013 Plan may be subject to different vesting schedules as the Plan Administrator may determine.

The Plan Administrator may impose limitations on the transferability of stock options granted under the Restated 2013 Plan in its discretion. Generally, a participant may not transfer a stock option granted under the Restated 2013 Plan other than by will or the laws of descent and distribution or, subject to approval by the Plan Administrator, pursuant to a domestic relations order. However, the Plan Administrator may permit transfer of a stock option in a manner that is not prohibited by applicable tax and securities laws. Options may not be transferred to a third party financial institution for value.

Limitations on Incentive Stock Options

In accordance with current federal tax laws, the aggregate fair market value, determined at the time of grant, of shares of our common stock with respect to ISOs that are exercisable for the first time by a participant during any calendar year under all of our stock plans may not exceed \$100,000. The stock options or portions of stock options that exceed this limit or otherwise fail to qualify as ISOs are treated as NSOs. No ISO may be granted to any person who, at the time of grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power unless the following conditions are satisfied:

- the exercise price of the ISO must be at least 110% of the fair market value of the common stock subject to the ISO on the date of grant;
 and
- the term of the ISO must not exceed five years from the date of grant.

Subject to adjustment for certain changes in our capitalization, the aggregate maximum number of shares of our common stock that may be issued pursuant to the exercise of ISOs under the Restated 2013 Plan is 25,000,000 shares.

Stock Appreciation Rights

Stock appreciation rights may be granted under the Restated 2013 Plan pursuant to stock appreciation right agreements. Each stock appreciation right is denominated in common stock share equivalents. The strike price of

each stock appreciation right will be determined by the Plan Administrator, but will in no event be less than 100% of the fair market value of the common stock subject to the stock appreciation right on the date of grant. The term of stock appreciation rights granted under the Restated 2013 Plan may not exceed ten years from the date of grant. The Plan Administrator may also impose restrictions or conditions upon the vesting of stock appreciation rights that it deems appropriate. The appreciation distribution payable upon exercise of a stock appreciation right may be paid in shares of our common stock, in cash, in a combination of cash and stock, or in any other form of consideration determined by the Plan Administrator and set forth in the stock appreciation right agreement. Stock appreciation rights will be subject to the same conditions upon termination of continuous service and restrictions on transfer as stock options under the Restated 2013 Plan.

Restricted Stock Awards

Restricted stock awards may be granted under the Restated 2013 Plan pursuant to restricted stock award agreements. A restricted stock award may be granted in consideration for cash, check, bank draft or money order payable to us, the participant's services performed for us, or any other form of legal consideration acceptable to the Plan Administrator. Shares of our common stock acquired under a restricted stock award may be subject to forfeiture to or repurchase by us in accordance with a vesting schedule to be determined by the Plan Administrator. Rights to acquire shares of our common stock under a restricted stock award may be transferred only upon such terms and conditions as are set forth in the restricted stock award agreement. Upon a participant's termination of continuous service for any reason, any shares subject to restricted stock awards held by the participant that have not vested as of such termination date may be forfeited to or repurchased by us.

Restricted Stock Unit Awards

Restricted stock unit awards may be granted under the Restated 2013 Plan pursuant to restricted stock unit award agreements. Payment of any purchase price may be made in any form of legal consideration acceptable to the Plan Administrator. A restricted stock unit award may be settled by the delivery of shares of our common stock, in cash, in a combination of cash and stock, or in any other form of consideration determined by the Plan Administrator and set forth in the restricted stock unit award agreement. Restricted stock unit awards may be subject to vesting in accordance with a vesting schedule to be determined by the Plan Administrator. Except as otherwise provided in a participant's restricted stock unit award agreement or other written agreement with us, restricted stock units that have not vested will be forfeited upon the participant's termination of continuous service for any reason.

Performance Awards

The Restated 2013 Plan allows us to grant performance awards. A performance award is an award that may vest or may be exercised, or that may become earned and paid, contingent upon the attainment of pre-determined performance goals during a performance period. A performance award may require the completion of a specified period of continuous service. The length of any performance period, the performance goals to be achieved during the performance period, and the measure of whether and to what degree such performance goals have been attained will be determined by the Plan Administrator in its discretion. In addition, to the extent permitted by applicable law and the applicable award agreement, the Plan Administrator may determine that cash may be used in payment of performance awards.

Performance goals under the Restated 2013 Plan are, for a performance period, the one or more goals established by the Plan Administrator for the performance period based upon the performance criteria that the Plan Administrator will select.

Performance goals may be based on a Company-wide basis, with respect to one or more business units, divisions, affiliates or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by

the Plan Administrator (i) in the award agreement at the time the award is granted or (ii) in such other document setting forth the performance goals at the time the performance goals are established, the Plan Administrator will appropriately make adjustments in the method of calculating the attainment of the performance goals for a performance period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated performance goals; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (12) to exclude the effects of the timing of acceptance for filing, review and/or approval of submissions to the U.S. Food and Drug Administration or any other regulatory bo

In addition, the Plan Administrator retains the discretion to define the manner of calculating the performance criteria it selects to use for a performance period and to reduce or eliminate the compensation or economic benefit due upon the attainment of any performance goal.

Other Awards

Other forms of awards valued in whole or in part by reference to, or otherwise based on, our common stock may be granted either alone or in addition to other awards under the Restated 2013 Plan. Subject to the terms of the Restated 2013 Plan, the Plan Administrator will have sole and complete authority to determine the persons to whom and the time or times at which such other awards will be granted, the number of shares of our common stock to be granted and all other terms and conditions of such other awards.

Clawback Policy

Awards granted under the Restated 2013 Plan will be subject to recoupment in accordance with any clawback policy that we are required to adopt pursuant to the listing standards of any national securities exchange or association on which our securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law, and any other clawback policy that the Company adopts. In addition, the Board may impose other clawback, recovery or recoupment provisions in an award agreement, including a reacquisition right in respect of previously acquired shares or other cash or property upon the occurrence of cause.

Changes to Capital Structure

In the event of certain capitalization adjustments, the Plan Administrator will appropriately and proportionately adjust: (i) the class(es) and maximum number of shares of our common stock subject to the Restated 2013 Plan; (ii) the class(es) and maximum number of shares of our common stock that may be issued pursuant to the exercise of ISOs; and (iii) the class(es) and number of shares of our common stock and the exercise, strike or purchase price per share of our common stock subject to outstanding awards.

Change in Control

The following applies to each outstanding award under the Restated 2013 Plan in the event of a change in control (as defined in the Restated 2013 Plan and described below), unless provided otherwise in the applicable

award agreement, in any other written agreement between a participant and the Company or an affiliate, or in any director compensation policy of the Company.

In the event of a change in control, any awards outstanding under the Restated 2013 Plan may be assumed, continued or substituted for by any surviving or acquiring corporation (or its parent company) (such entity, the "acquiring entity"), and any reacquisition or repurchase rights held by us with respect to the award may be assigned to the acquiring entity. If the acquiring entity does not assume, continue or substitute for such awards, then (i) with respect to any such awards that are held by participants who are employees or non-employee directors and, in each case, whose continuous service has not terminated prior to the effective time of the change in control (such participants, the "current employee and director participants"), the vesting (and exercisability, if applicable) of such awards will be accelerated in full (and with respect to any such awards that are subject to performance-based vesting conditions or requirements, vesting will be deemed to be satisfied at the target level of performance as of the date of the change in control) to a date prior to the effective time of the change in control (contingent upon the effectiveness of the change in control), and such awards will terminate if not exercised (if applicable) at or prior to the effective time of the change in control, and (ii) any such awards that are held by persons other than current employee and director participants will terminate if not exercised (if applicable) at or prior to the effective time of the change in control, except that any reacquisition or repurchase rights held by us with respect to such awards will not terminate and may continue to be exercised notwithstanding the change in control.

In the event an award will terminate if not exercised at or prior to the effective time of a change in control, the Plan Administrator may provide that the holder of such award may not exercise such award but instead will receive a payment equal in value to the excess, if any, of (i) the value of the property the participant would have received upon the exercise of the award, over (ii) any exercise price payable by such holder in connection with such exercise.

For purposes of the foregoing, an "assumed award" generally means any outstanding award under the Restated 2013 Plan that was assumed or continued, or any outstanding similar award that was granted in substitution for an award under the Restated 2013 Plan, in each case by the acquiring entity in connection with the applicable change in control.

Under the Restated 2013 Plan, a "change in control" generally means the occurrence of any one or more of the following events: (1) the acquisition by any person, entity or group of our securities representing more than 50% of the combined voting power of our then outstanding securities, other than by virtue of a merger, consolidation, or similar transaction; (2) a merger, consolidation or similar transaction in which our stockholders immediately before such transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity) in substantially the same proportions as their ownership immediately prior to such transaction; (3) our stockholders approve or our Board approves our complete dissolution or liquidation, or our complete dissolution or liquidation otherwise occurs; (4) a sale, lease, exclusive license or other disposition of all or substantially all of our assets, other than to an entity, more than 50% of the combined voting power of which is owned by our stockholders in substantially the same proportions as their ownership of our outstanding voting securities immediately prior to such transaction; or (5) when a majority of our Board becomes comprised of individuals who were not serving on our Board on the date the Restated 2013 Plan was adopted by our Compensation Committee (the "incumbent Board of Directors"), or whose nomination, appointment, or election was not approved by a majority of the incumbent Board of Directors still in office.

Plan Amendments and Termination

The Plan Administrator will have the authority to amend or terminate the Restated 2013 Plan at any time. However, except as otherwise provided in the Restated 2013 Plan, no amendment or termination of the Restated

2013 Plan may materially impair a participant's rights under his or her outstanding awards without the participant's consent. We will obtain stockholder approval of any amendment to the Restated 2013 Plan as required by applicable law and listing requirements. Unless terminated sooner by the Board, the Restated 2013 Plan will automatically terminate on earliest to occur of (i) April 20, 2028, (ii) the date on which all shares available for issuance under the Restated 2013 Plan have been issued as fully vested shares or (iii) the termination of all outstanding awards in connection with a change in control.

U.S. Federal Income Tax Consequences

The following is a summary of the principal United States federal income tax consequences to participants and us with respect to participation in the Restated 2013 Plan. This summary is not intended to be exhaustive and does not discuss the income tax laws of any local, state or foreign jurisdiction in which a participant may reside. The information is based upon current federal income tax rules and therefore is subject to change when those rules change. Because the tax consequences to any participant may depend on his or her particular situation, each participant should consult the participant's tax adviser regarding the federal, state, local and other tax consequences of the grant or exercise of an award or the disposition of stock acquired the Restated 2013 Plan. The Restated 2013 Plan is not qualified under the provisions of Section 401(a) of the Internal Revenue Code of 1986, as amended, (the "Code") and is not subject to any of the provisions of the Employee Retirement Income Security Act of 1974. Our ability to realize the benefit of any tax deductions described below depends on our generation of taxable income as well as the requirement of reasonableness and the satisfaction of our tax reporting obligations.

Nonstatutory Stock Options

Generally, there is no taxation upon the grant of an NSO if the stock option is granted with an exercise price equal to the fair market value of the underlying stock on the grant date. Upon exercise, a participant will recognize ordinary income equal to the excess, if any, of the fair market value of the underlying stock on the date of exercise of the stock option over the exercise price. If the participant is employed by us or one of our affiliates, that income will be subject to withholding taxes. The participant's tax basis in those shares will be equal to his or her fair market value on the date of exercise of the stock option, and the participant's capital gain holding period for those shares will begin on that date.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the participant.

Incentive Stock Options

The Restated 2013 Plan provides for the grant of stock options that are intended to qualify as "incentive stock options," as defined in Section 422 of the Code. Under the Code, a participant generally is not subject to ordinary income tax upon the grant or exercise of an ISO. If the participant holds a share received upon exercise of an ISO for more than two years from the date the stock option was granted and more than one year from the date the stock option was exercised, which is referred to as the required holding period, the difference, if any, between the amount realized on a sale or other taxable disposition of that share and the participant's tax basis in that share will be long-term capital gain or loss.

If, however, a participant disposes of a share acquired upon exercise of an ISO before the end of the required holding period, which is referred to as a disqualifying disposition, the participant generally will recognize ordinary income in the year of the disqualifying disposition equal to the excess, if any, of the fair market value of the share on the date of exercise of the stock option over the exercise price. However, if the sales proceeds are less than the fair market value of the share on the date of exercise of the stock option, the amount of ordinary income recognized by the participant will not exceed the gain, if any, realized on the sale. If the amount

realized on a disqualifying disposition exceeds the fair market value of the share on the date of exercise of the stock option, that excess will be short-term or long-term capital gain, depending on whether the holding period for the share exceeds one year.

For purposes of the alternative minimum tax, the amount by which the fair market value of a share of stock acquired upon exercise of an ISO exceeds the exercise price of the stock option generally will be an adjustment included in the participant's alternative minimum taxable income for the year in which the stock option is exercised. If, however, there is a disqualifying disposition of the share in the year in which the stock option is exercised, there will be no adjustment for alternative minimum tax purposes with respect to that share. In computing alternative minimum taxable income, the tax basis of a share acquired upon exercise of an ISO is increased by the amount of the adjustment taken into account with respect to that share for alternative minimum tax purposes in the year the stock option is exercised.

We are not allowed a tax deduction with respect to the grant or exercise of an ISO or the disposition of a share acquired upon exercise of an ISO after the required holding period. If there is a disqualifying disposition of a share, however, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the participant, subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and provided that either the employee includes that amount in income or we timely satisfy our reporting requirements with respect to that amount.

Restricted Stock Awards

Generally, the recipient of a restricted stock award will recognize ordinary income at the time the stock is received equal to the excess, if any, of the fair market value of the stock received over any amount paid by the recipient in exchange for the stock. If, however, the stock is not vested when it is received (for example, if the employee is required to work for a period of time in order to have the right to sell the stock), the recipient generally will not recognize income until the stock becomes vested, at which time the recipient will recognize ordinary income equal to the excess, if any, of the fair market value of the stock on the date it becomes vested over any amount paid by the recipient in exchange for the stock. A recipient may, however, file an election with the Internal Revenue Service, within 30 days following his or her receipt of the restricted stock award, to recognize ordinary income, as of the date the recipient receives the restricted stock award, equal to the excess, if any, of the fair market value of the stock on the date the restricted stock award is granted over any amount paid by the recipient for the stock.

The recipient's basis for the determination of gain or loss upon the subsequent disposition of shares acquired from a restricted stock award will be the amount paid for such shares plus any ordinary income recognized either when the stock is received or when the stock becomes vested.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the restricted stock award.

Restricted Stock Unit Awards

Generally, the recipient of a restricted stock unit award structured to comply with the requirements of Section 409A of the Code or an exception to Section 409A of the Code will recognize ordinary income at the time the stock is delivered equal to the excess, if any, of the fair market value of the stock received over any amount paid by the recipient in exchange for the stock. To comply with the requirements of Section 409A of the Code, the stock subject to a restricted stock unit award may generally only be delivered upon one of the following events: a fixed calendar date (or dates), separation from service, death, disability or a change in control. If delivery occurs on another date, unless the restricted stock unit award otherwise complies with or qualifies for an exception to the requirements of Section 409A of the Code (including delivery upon achievement

of a performance goal), in addition to the tax treatment described above, the recipient will owe an additional 20% federal tax and interest on any taxes owed.

The recipient's basis for the determination of gain or loss upon the subsequent disposition of shares acquired from a restricted stock unit award will be the amount paid for such shares plus any ordinary income recognized when the stock is delivered.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the restricted stock unit award.

Stock Appreciation Rights

Generally, if a stock appreciation right is granted with an exercise price equal to the fair market value of the underlying stock on the grant date, the recipient will recognize ordinary income equal to the fair market value of the stock or cash received upon such exercise. Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock appreciation right.

Section 162(m) Limitations

Under Section 162(m) of the Code, compensation paid to any publicly held corporation's "covered employees" that exceeds \$1 million per taxable year for any covered employee is generally non-deductible. Awards granted under the Restated 2013 Plan will be subject to the deduction limit under Section 162(m) of the Code and will not be eligible to qualify for the performance-based compensation exception under Section 162(m) of the Code pursuant to the transition relief provided by the Tax Cuts and Jobs Act.

New Plan Benefits under Restated 2013 Plan

The following table sets forth certain information regarding future benefits under the Restated 2013 Plan.

Name and Position	Dollar Value (\$)	Number of Shares
Dr. Remy Luthringer	(1)	354,302(1)
Chief Executive Officer		
Geoffrey Race	(1)	275,568(1)
Executive Vice President, Chief Financial Officer and Chief Business Officer		
Richard Russell	(1)	185,025(1)
President		
All current executive officers as a group	(1)	1,633,727(1)
All current directors who are not executive officers as a group	(2)	120,000(2)
All current employees, including current officers who are not executive officers, as a group	(1)	334,617(1)

⁽¹⁾ Awards granted under the Restated 2013 Plan to our executive officers and other employees are discretionary and are not subject to set benefits or amounts under the terms of the Restated 2013 Plan. However, in December 2019, our Compensation Committee approved for grant a number of stock option awards to certain employees (including our executive officers) under the 2013 Plan subject to stockholder approval of this Proposal No. 2, and the number of shares subject to each such award is indicated in this table.

(2) Awards granted under the Restated 2013 Plan to our non-employee directors are discretionary and are not subject to set benefits or amounts under the terms of the Restated 2013 Plan. However, pursuant to our current compensation program for non-employee directors, each of our current non-employee directors annually is eligible to receive an annual option grant to purchase 20,000 shares of common stock per year ("Annual Grant"). The aggregate number of shares subject to such Annual Grants that will automatically be granted to all of our current directors who are not executive officers as a group will be 120,000 shares each year. For additional information regarding our current compensation program for non-employee directors, please see "Director Compensation—Non-Employee Director Compensation Policy."

2013 Plan Benefits

The following table sets forth, for each of the individuals and groups indicated, the number of shares of our common stock subject to awards granted (even if not currently outstanding) under the 2013 Plan since its original effectiveness and through April 17, 2020.

Name and position Dr. Remy Luthringer Chief Executive Officer	Number of shares 2,650,163
Geoffrey Race	1,334,150
Executive Vice President, Chief Financial Officer and Chief Business Officer	1,55 1,150
Richard Russell	309,975
President	
All current executive officers as a group	6,751,586
All current directors who are not executive officers as a group	564,467
Each nominee for election as a director:	
Dr. David Kupfer	90,000
Jan van Heek	124,467
Each associate of any executive officers, current directors or director nominees	_
Each other person who received or is to receive 5% of awards	_
All employees, including all current officers who are not executive officers, as a group	1,088,467

THE BOARD RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 2 .

PROPOSAL 3

ADVISORY VOTE ON EXECUTIVE COMPENSATION

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and Section 14A of the Exchange Act, our stockholders are entitled to vote to approve, on an advisory basis, the compensation of our named executive officers as disclosed in this proxy statement in accordance with the SEC rules.

This proposal, commonly known as a "say on pay" proposal, gives our stockholders the opportunity to express their views on our named executive officers' compensation. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this proxy statement. The compensation of our named executive officers is disclosed in the section entitled "Executive and Director Compensation" below, including the compensation tables and narrative disclosure contained in this proxy statement. As discussed in those disclosures, we believe that our compensation policies and decisions are focused on pay-for-performance principles and strongly aligned with our stockholders' interests. Compensation of our named executive officers is designed to enable us to attract and retain talented and experienced executives, whose knowledge, skills and performance are critical to our success, and motivate these executive officers to achieve our business objectives and to lead us in a competitive environment.

We are asking our stockholders to indicate their support for our named executive officer compensation as described in this Proxy Statement.

The say on pay vote is advisory, and therefore not binding on us, our Compensation Committee or our Board. Our Board and Compensation Committee value the opinions of our stockholders and to the extent there is any significant vote against the named executive officer compensation as disclosed in this proxy statement, we will consider our stockholders' concerns and our Compensation Committee will evaluate whether any actions are necessary to address those concerns.

THE BOARD RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 3

PROPOSAL 4

ADVISORY VOTE ON THE FREQUENCY OF SOLICITATION OF FUTURE ADVISORY STOCKHOLDER APPROVAL OF NAMED EXECUTIVE OFFICER COMPENSATION

The Dodd-Frank Act and Section 14A of the Exchange Act also enable our stockholders, at least once every six years, to indicate their preference regarding how frequently we should solicit a non-binding advisory vote on the compensation of our named executive officers, as disclosed pursuant to the SEC's compensation disclosure rules, such as Proposal 3 above. By voting on this Proposal 4, stockholders may indicate whether they would prefer a non-binding vote on the compensation of our named executive officers every one, two or three years.

After considering the benefits and consequences of each alternative, the Board recommends that the advisory vote on the compensation of our named executive officers be submitted to stockholders each year.

The Board believes that an annual advisory vote on the compensation of our named executive officers is the most appropriate policy for us at this time. While our executive compensation program is designed to promote the creation of stockholder value over the long term, the Board recognizes that executive compensation disclosures are made annually, and holding an annual advisory vote on the compensation of our named executive officers provides us with more direct and immediate feedback on our executive compensation program, policies and practices. However, stockholders should note that because a proposed annual advisory vote would occur well after the beginning of the compensation year, and because the different elements of our executive compensation programs are designed to operate in an integrated manner and to complement one another, in many cases it may not be appropriate or feasible to change our compensation plans and arrangements for our executive officers in consideration of any single year's advisory vote by the time of the following year's annual meeting of stockholders. We believe, however, that an annual advisory vote on the compensation of our named executive officers is consistent with our practice of seeking input and engaging in dialogue with our stockholders on corporate governance matters.

While the Board believes that its recommendation is appropriate at this time, the stockholders are not voting to approve or disapprove that recommendation, but are instead asked to indicate their preferences, on an advisory basis, as to whether the non-binding advisory vote on the approval of the compensation of our named executive officers should be held every year, every other year or every three years. The option among those choices that receives the votes of the holders of a majority of shares present in person or represented by proxy and entitled to vote at the Annual Meeting will be deemed to be the frequency preferred by the stockholders.

The Board values the opinions of the stockholders in this matter and, to the extent there is any significant vote in favor of one frequency over the other options, even if less than a majority, the Board will consider the stockholders' concerns and evaluate any appropriate next steps. However, because this vote is advisory and, therefore, not binding on the Board or us, the Board may decide that it is in the best interests of the stockholders that we hold an advisory vote on named executive officer compensation more or less frequently than the option preferred by the stockholders. The vote will not be construed to create or imply any change or addition to the fiduciary duties of the Company or the Board.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF "ONE YEAR" FOR PROPOSAL 4.

PROPOSAL 5

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board has selected Deloitte & Touche LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2020 and has further directed that the Company's management submit the selection of its independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Deloitte & Touche LLP has audited the Company's consolidated financial statements since the fiscal year ended December 31, 2011. Representatives of Deloitte & Touche LLP are expected to be present at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company's Bylaws nor other governing documents or law require stockholder ratification of the selection of Deloitte & Touche LLP as the Company's independent registered public accounting firm. However, the Audit Committee is submitting the selection of Deloitte & Touche LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

The affirmative vote of the holders of a majority of the shares present at the Annual Meeting or represented by proxy and entitled to vote on the matter at the Annual Meeting, will be required to ratify the selection of Deloitte & Touche LLP.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents the aggregate fees billed to the Company for the fiscal years ended December 31, 2019 and 2018, by Deloitte & Touche LLP, the Company's principal accountant.

	Fiscal Yea	Fiscal Year Ended	
	2019	2018	
Audit fees (1)	\$656,500	\$502,500	
Audit-related fees	_	_	
Tax fees	\$ —	\$ —	
All other fees (2)	\$	\$ 1,895	
Total fees	\$656,600	\$504,395	

- (1) For both fiscal years ended December 31, 2019 and 2018, audit fees represent fees for audit services rendered in connection with the audit of our consolidated financial statements, as well as fees associated with reviews of documents filed with the SEC, our Annual Report on Form 10-K, and our quarterly consolidated financial statements included in our Quarterly Reports on Form 10-Q. For the fiscal year ended December 31, 2018, audit fees also include those associated with the filing of a shelf registration statement on Form S-3, as well as the filing of two registration statements on Form S-8, and the delivery of related consents.
- (2) For fiscal year ended December 31, 2018, included in all other fees are fees related to access to the Deloitte & Touche online accounting research database.

All fees described above were pre-approved by the Audit Committee.

In connection with the audit of the 2019 consolidated financial statements, the Company entered into an engagement agreement with Deloitte & Touche LLP that sets forth the terms by which Deloitte & Touche LLP will perform audit services for the Company.

PRE-APPROVAL POLICIES AND PROCEDURES

The Audit Committee has adopted a policy and procedures for the pre-approval of audit and non-audit services rendered by the Company's independent registered public accounting firm, Deloitte & Touche LLP. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services, and tax services up to specified amounts. Pre-approval may also be given as part of the Audit Committee's approval of the scope of the engagement of the independent auditor, or on an individual, explicit, case-by-case basis before the independent auditor is engaged to provide each service. The pre-approval of services may be delegated to one or more of the Audit Committee's members, but the decision must be reported to the full Audit Committee at its next scheduled meeting.

The Audit Committee has determined that the rendering of services other than audit services by Deloitte & Touche LLP is compatible with maintaining the principal accountant's independence.

THE BOARD RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 5

EXECUTIVE OFFICERS

The following table sets forth information concerning our executive officers, including their ages as of March 31, 2020. Biographical information for our Chief Executive Officer and director, Dr. Remy Luthringer, is included above with the director biographies under the caption "Directors Continuing in Office Until the 2022 Annual Meeting."

<u>Name</u>	Age	Position
Dr. Remy Luthringer	59	Chief Executive Officer and Executive Chairman of the Board of Directors
Richard Russell	56	President
Geoffrey Race	59	Executive Vice President, Chief Financial Officer and Chief Business Officer
Dr. Michael Davidson	70	Chief Medical Officer
Joseph Reilly	45	Senior Vice President and Chief Operating Officer
Frederick Ahlholm	54	Senior Vice President and Chief Accounting Officer
Dr. Jay B. Saoud	61	Senior Vice President, Head of Research and Development
Devin Smith	52	Senior Vice President, General Counsel

Richard Russell was appointed our President in December 2017. Mr. Russell has more than 20 years of experience leading commercial operations, including developing and implementing sales and marketing activities for major biotechnology and pharmaceutical brands in North America and the European Union. His commercial and operational expertise encompasses a number of therapeutic areas, including CNS disorders, neurodegenerative disorders, cardiovascular disease and women's health. Prior to joining us, Mr. Russell served as President and Chief Executive Officer at Stallergenes Greer, Inc., a global pharmaceutical company. From 2011 to 2014, Mr. Russell served as Executive Vice President and Chief Commercial Officer at Sunovion, a Massachusetts pharmaceutical company. Mr. Russell has also held senior management positions at Ares Allergy Holdings, EMD Serono, Sanofi-Aventis and Novartis. Mr. Russell holds a B.A. in chemistry from Bates College and an M.S. in organic chemistry from the University of New Hampshire.

Geoffrey Race has provided services to us since July 2010, first as a consultant and then as an employee beginning in May 2014 as Executive Vice President and Chief Financial Officer. Mr. Race was named our Chief Business Officer in January 2016. Prior to joining us, Mr. Race served as the Chief Executive Officer and acting Chief Financial Officer of Funxional Therapeutics Ltd., a clinical stage pharmaceutical company which was spun out of Cambridge University, UK, from June 2010 to November 2013. Mr. Race is currently a member of the board of directors of Huq Industries Ltd. and F-star Therapeutics Ltd. Mr. Race is a Fellow of the Institute of Chartered Management Accountants and earned his M.B.A. from Durham University Business School (UK).

Dr. Michael Davidson has provided research and development consulting services to us since 2014 and was appointed our Chief Medical Officer effective December 2016. He is currently the director of the Stuckinski Centre for Alzheimer's Disease Care and Research in Israel. Previously, Dr. Davidson worked in the Department of Psychiatry at the Mount Sinai School of Medicine in New York. Before joining Minerva, he also has served as the Chief Psychiatrist at the Sheba Medical Centre in Tel Aviv, Israel and as a consultant to many major pharmaceutical companies. Dr. Davidson has published over 300 articles, primarily in peer reviewed journals, in the areas of Schizophrenia and Alzheimer's disease. Dr. Davidson previously served on the board of directors at CliniRX Tangent Research, a clinical research organization. He currently serves as an advisory board member of several professional organizations, as chief editor of a major professional journal, and as a reviewer for several other professional journals.

Joseph Reilly has provided services to us since January 2014 and was named our Chief Operating Officer in July 2014. Mr. Reilly was named Senior Vice President in May 2015. Prior to joining us, Mr. Reilly served as Vice President and Head of Commercial Strategy and Operations at Genzyme Corporation, a Sanofi pharmaceutical company, from August 2012 to December 2013. He earned his B.S. in Finance at Boston College and his M.S. in Finance from the Wallace E. Carroll Graduate School of Management at Boston College.

Frederick Ahlholm has provided services to us since January 2014, first as a consultant and then as an employee beginning in June 2014. Mr. Ahlholm was named our Vice President and Chief Accounting Officer in July 2014 and was named Senior Vice President in May 2015. Prior to joining us, from 2010 to 2013, Mr. Ahlholm served as Vice President of Finance and also as Chief Accounting Officer for Amarin Corporation, a commercial biopharmaceutical company. Mr. Ahlholm has over 15 years of experience leading the finance organization at publicly-traded biotech companies, is a CPA and earned his BA in Business Administration at the University of Notre Dame.

Dr. Jay B. Saoud has provided services to us since 2014, first as an employee of PPRS Research, Inc., a strategic research and development consulting partner for Minerva, and then as an employee beginning in August 2017. Before joining Minerva, Dr. Saoud was president and chief executive officer of PPRS Research, Inc., where he now serves as a part-time consultant. Since 2010, Dr. Saoud has also served as founder and general manager of Pharmaceutical Product Development Associates, LLC, a group dedicated to helping move products at various stages of drug development by creating significant incremental clinical and regulatory benefits. Dr. Saoud has more than 28 years of research and development experience in both industry and academia, where he played a critical role in the design, conduct and reporting of clinical trials across multiple therapeutic areas including CNS. Dr. Saoud has been involved in the development of more than 125 active molecules in multiple therapeutic areas. He has a record of successful pre-market and registration submissions in global regulatory jurisdictions and approval of 11 New Drug Applications (NDAs).

Devin Smith has provided services to us since July 2018. Mr. Smith has more than 19 years of legal and compliance experience serving clients in the biotechnology and pharmaceutical industries. Prior to joining us, Mr. Smith served as Served as General Counsel and Company Secretary of Stallergenes Greer plc, a global biopharmaceutical company focused on allergy immunotherapy products, beginning in October 2015. From October 2011 until October 2015, Mr. Smith was the Vice President and General Counsel and led the North American legal department for EMD Serono, Inc., the biopharmaceutical division of Merck KGaA. From October 2006 until October 2011, he was the Associate General Counsel for EMD Serono. Prior to EMD Serono, he was a partner at the international law firm of Nixon Peabody LLP. Mr. Smith currently serves on the board of directors of Chainfast Incorporated. Mr. Smith received a B.A. from the University of North Carolina- Chapel Hill and his law degree (cum laude) from Suffolk University Law School.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of the Company's common stock as of April 22, 2020 by: (i) each director and nominee for director; (ii) each of the executive officers named in the Summary Compensation Table; (iii) all executive officers and directors of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than five percent of its common stock.

NAME	Beneficial Ownership (1) Shares	Percentage
Named Executive Officers and Directors:		
Dr. Remy Luthringer (2)	2,939,578	7.14%
Geoffrey Race (3)	1,217,887	3.03%
Richard Russell (4)	615,645	1.55%
William F. Doyle (5)	139,444	*
Dr. Fouzia Laghrissi-Thode (6)	90,000	*
Dr. David Kupfer (7)	337,123	*
Hans Peter Hasler (8)	83,333	*
Jan van Heek (9)	137,800	*
Jeryl Hilleman (10)	46,556	*
All executive officers and directors as a group (14 persons)	6,963,151	15.60%
Other 5% Stockholders:		
Funds affiliated with Federated Hermes, Inc. (11)	9,610,200	24.50%
Funds affiliated with Index Ventures (12)	3,899,189	9.94%
BlackRock, Inc. (13)	2,111,142	5.38%
FMR LLC and its affiliates (14)	2,026,914	5.17%

- * Represents beneficial ownership of less than 1% of our outstanding common stock.
- (1) This table is based upon information supplied by officers, directors and, in the case of principal stockholders, Schedules 13D and 13G filed with the SEC or information provided by our transfer agent, Computershare Trust Company, N.A.. The address of each executive officer and director listed on the table is c/o Minerva Neurosciences, Inc. 1601 Trapelo Road, Suite 286, Waltham, MA 02451. We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the executive officers and directors named in the table above have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws. Applicable percentages are based on 39,219,134 shares outstanding on April 22, 2020, adjusted as required by rules promulgated by the SEC.
- (2) Consists of (a) 926,604 shares of common stock beneficially owned by Wint2felden Holding SA, a company wholly owned by Dr. Luthringer; (b) 49,040 shares of common stock owned by Dr. Luthringer himself, and (c) options to purchase 1,963,934 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (3) Consists of (a) 205,044 shares of common stock and (b) options to purchase 1,012,843 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (4) Consists of (a) 33,770 shares of common stock and (b) options to purchase 581,875 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (5) Consists of (a) 26,111 shares of common stock and (b) options to purchase 113,333 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (6) Consists of options to purchase 90,000 shares of common stock that are exercisable within 60 days of April 22, 2020.

- (7) Consists of (a) 219,188 shares of common stock, (b) 27,935 shares of common stock owned by Dr. Kupfer's spouse, and (c) options to purchase 90,000 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (8) Consists of (a) 10,000 shares of common stock and (b) options to purchase 73,333 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (9) Consists of (a) 13,333 shares of common stock and (b) options to purchase 124,467 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (10) Consists of (a) 1,000 shares of common stock and (b) options to purchase 45,556 shares of common stock that are exercisable within 60 days of April 22, 2020.
- (11) This information is based solely on the information reported on the Schedule 13G/A filed by Federated Hermes, Inc. on February 14, 2020. Federated Hermes, Inc. (the "Federated Parent") is the parent holding company of Federated Equity Management Company of Pennsylvania and Federated Global Investment Management Corp. (the "Federated Investment Advisers"), which act as investment advisers to registered investment companies and separate accounts that collectively own 9,610,200 shares of common stock. The Federated Investment Advisers are wholly owned subsidiaries of FII Holdings, Inc., which is a wholly owned subsidiary of the Federated Parent. All of the Federated Parent's outstanding voting stock is held in the Voting Shares Irrevocable Trust for which Thomas R. Donahue, Rhodora J. Donahue and J. Christopher Donahue act as trustees. The address of Federated Investors is Federated Investors Tower, Pittsburgh, Pennsylvania 15222.
- (12) This information is based solely on the information reported on the Schedule 13D/A filed June 18, 2019 by Index Ventures and the sale of shares on June 18, 2019, June 19, 2019, June 20, 2019 and June 24, 2019 as report on Form 4s. The number of shares beneficially owned consists of (a) 675,863 shares of common stock held by Index Ventures III (Jersey) L.P. ("IVIII Jersey"), (b) 1,372,944 shares of common stock Index Ventures III (Delaware) L.P. ("IVIII Delaware"), (c) 24,458 shares of common held by Index Ventures III Parallel Entrepreneur Fund (Jersey), L.P. ("IVPEF III" and collectively with IVIII Jersey and IVIII Delaware, the "Index III Funds"), (d) 49,501 shares of common stock held by Yucca (Jersey) SLP ("Yucca"), (e) 938,845 shares of common stock held by Index Ventures IV (Jersey) L.P. ("IVIV Jersey"), (f) 89,115 shares of common stock held by Index Ventures IV Parallel Entrepreneur Fund (Jersey), L.P. ("IVPEF IV" and together with IVIV Jersey, the "Index IV Funds") (g) 742,447 shares of common stock held by Index Ventures V (Jersey), L.P. ("IVV Jersey"), and (h) 6,016 shares of common stock held by Index Ventures V Parallel Entrepreneur Fund (Jersey), L.P. ("IVPEF V" and together with IVV Jersey, the "Index V Funds"). Index Venture Associates III Limited ("Index Venture III") is the general partner of each of the Index III Funds. The address of Index Venture III and the Index III Funds is at No.1 Seaton Place, St. Helier, Jersey JE4 8YJ, Channel Islands. Index Venture Associates IV Limited ("Index Venture IV") is the general partner of each of the Index IV Funds. Index Venture Associates V Limited ("Index Venture V") is the general partner of each of the Index V Funds. Yucca is a co-investment vehicle that is contractually required to mirror the investments of the Index III Funds, Index IV Funds, and Index V Funds. Yucca has sole voting and dispositive control over these shares of common stock, except that Index Venture III, Index Venture IV, and Index Venture V, affiliates of Yucca, may be deemed to share the right to direct the voting and dispositive control over the shares held by Yucca. The address of Index Venture IV, the Index IV Funds, Index Venture V, the Index Venture V Funds and Yucca is 44 Esplanade, St. Helier, Jersey JE4 9WG, Channel Islands.
- (13) This information is based solely on the information reported on the Schedule 13G/A filed by BlackRock, Inc. on February 5, 2020. BlackRock, Inc. and/or its subsidiaries have sole voting power with respect to 2,384,947 shares of common stock and sole dispositive power with respect to 2,111,142 shares of common stock. The address of BlackRock, Inc. is 55 East 52 nd Street, New York, NY 10055.
- (14) This information is based solely on the information reported on the Schedule 13G/A filed by FMR LLC and its affiliates on February 7, 2020. Consists of 2,026,914 shares of common stock. The address for FMR LLC is 245 Summer Street, Boston, Massachusetts 02110.

DELINQUENT SECTION 16(A) REPORTS

Section 16(a) of the Exchange Act requires the Company's directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors, and greater than ten percent stockholders are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file.

To the Company's knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended December 31, 2019, all Section 16(a) filing requirements applicable to its officers, directors, and greater than ten percent beneficial owners were complied with.

EXECUTIVE AND DIRECTOR COMPENSATION

SUMMARY COMPENSATION TABLE

The following table shows for the fiscal years ended December 31, 2019 and 2018 the compensation of the Company's Chief Executive Officer and its two other most highly compensated executive officers at December 31, 2019, which we refer to as our "named executive officers."

NAME AND PRINCIPAL POSITION Dr. Remy Luthringer Chief Executive Officer	<u>YEARS</u> 2019 2018	SALARY (\$) 543,375 525,000	BONUS (\$) 190,183 196,875	OPTIONS AWARDS (\$) (1) 428,899 3,185,900	STOCK AWARDS (\$) —	ALL OTHER COMPENSATION (\$) 2,477(2) 2,470(3)	TOTAL (\$) 1,164,934 3,910,245
Geoffrey Race Executive Vice President, Chief Financial Officer and Chief Business Officer	2019 2018	410,900 397,000	102,725 148,875	333,589 978,250	_	3,210 ⁽⁴⁾ 3,332 ⁽⁵⁾	850,424 1,527,457
Richard Russell (8) President	2019 2018	491,600 475,000	103,236 278,125	223,978 1,453,400	_	14,931(6) 15,045(7)	833,745 2,221,570

- (1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during 2018 and 2019 computed in accordance with FASB ASC Topic 718. The assumptions we used in valuing options are described in Note 8 to our consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 9, 2020. The aggregate grant date fair value does not take into account any estimated forfeitures related to service-vesting conditions. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.
- (2) Represents \$2,477 paid in 2019 by the Company for Dr. Luthringer's life insurance premiums.
- (3) Represents \$2,470 paid in 2018 by the Company for Dr. Luthringer's life insurance premiums.
- (4) Represents \$3,210 paid in 2019 by the Company for Mr. Race's life insurance premiums.
- (5) Represents \$3,332 paid in 2018 by the Company for Mr. Race's life insurance premiums.
- (6) Represents \$14,241 paid in 2019 by the Company in 401(k) contributions and \$690 paid in 2019 by the Company for Mr. Russell's life insurance premiums.
- (7) Represents \$14,631 paid in 2018 by the Company in 401(k) contributions and \$414 paid in 2018 by the Company for Mr. Russell's life insurance premiums.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END

The following table shows for the fiscal year ended December 31, 2019, certain information regarding outstanding equity awards at fiscal year end for the named executive officers.

		Option Awards	Stock Awards			
<u>Name</u>	Number of Securities Underlying Unexercised Options (#)Exercisable	Number of Securities Underlying Unexercised Options (#)Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested (\$) (10)
Dr. Remy Luthringer	649,842		6.00	6/29/24		
	399,623	_	5.19	4/13/25		
	285,719	_	4.71	12/03/25		
	112,500	37,500	13.45	12/13/26		
	175,000	175,000(1)(2)	6.10	12/12/27	18,750(8)	133,313
	100,000	100,000(3)	6.20	1/1/2028		
	102,500	307,500(4)	7.96	12/10/2028		
	_	95,968(5)	7.11	12/30/2029		
Geoffrey Race	346,585 213,133 175,000 75,000	 25,000	6.00 5.19 4.71 13.45	6/29/24 4/13/25 12/03/25 12/13/26		
	100,000 43,750 —	100,000(1) (2) 131,250(4) 74,432(5)	6.10 7.96 7.11	12/13/20 12/12/27 12/10/2028 12/30/2029	12,500(8)	88,875
Richard Russell	387,500 65,000 —	387,500(6) 195,000(2) 49,975(5)	6.05 7.96 7.11	12/10/2027 12/10/2028 12/30/2029	20,000(9)	142,200

- (1) 25% of the shares subject to the option vested and became exercisable on December 14, 2017 and the balance of the shares will vest and become exercisable in a series of twelve equal quarterly installments upon the executive officer's completion of each quarter of service over the three-year period thereafter.
- (2) 25% of the shares subject to the option vested and became exercisable on December 13, 2018 and the balance of the shares will vest and become exercisable in a series of twelve equal quarterly installments upon the executive officer's completion of each quarter of service over the three-year period thereafter.
- (3) 25% of the shares subject to the option vested and became exercisable on December 13, 2018, and the balance of the shares vest and become exercisable in a series of twelve equal quarterly installments upon the executive officer's completion of each quarter of service over the three-year period thereafter.
- (4) 25% of the shares subject to the option vested and became exercisable on December 11, 2019 and the balance of the shares will vest and become exercisable in a series of twelve equal quarterly installments upon the executive officer's completion of each quarter of service over the three-year period thereafter.
- (5) 25% of the shares subject to the option will vest and become exercisable on December 31, 2020, and the balance of the shares vest and become exercisable in a series of twelve equal quarterly installments upon the executive officer's completion of each quarter of service over the three-year period thereafter.
- (6) 25% of the shares subject to the option vested and became exercisable on December 11, 2018, and the balance of the shares vest and become exercisable in a series of twelve equal quarterly installments upon Mr. Russell's completion of each quarter of service over the three-year period thereafter.
- (7) 25% of the shares subject to the option vested and became exercisable on July 23, 2019 and the balance of the shares will vest and become exercisable in a series of twelve equal quarterly installments upon Mr. Smith's completion of each quarter of service over the three-year period thereafter.

- (8) The RSUs vest in four equal annual installments beginning on December 14, 2017 and will be fully vested on December 14, 2020, in all cases so long as there has been no break in the continuous service of the executive officer through such date.
- (9) The RSUs vest in four equal annual installments beginning on December 11, 2017 and will be fully vested on December 11, 2020, in all cases so long as there has been no break in Mr. Russell's continuous service through such date.
- (10) The market value is calculated based on the closing price of our common stock on December 31, 2019, or \$7.11.

ARRANGEMENTS WITH OUR NAMED EXECUTIVE OFFICERS

Each of our named executive officers is party to a written employment, offer or consulting agreement with us. Before becoming our employees, Dr. Luthringer and Mr. Race provided services to us under consulting agreements.

Dr. Remy Luthringer

We entered into an Amended and Restated Employment Agreement with Dr. Luthringer through our wholly owned subsidiary, Mind-NRG SARL, in August 2016 setting forth the terms of his employment. Dr. Luthringer's principal place of work is in Geneva, Switzerland. In 2019, Dr. Luthringer was entitled to an annual base salary of \$543,375, which increased to an annual base salary of \$565,110, starting on January 1, 2020. Dr. Luthringer is also entitled to a discretionary bonus payment for each calendar year that ends during his employment of up to 50% of his base salary for that calendar year. Dr. Luthringer is also eligible to participate in the Company's employee benefit, welfare and other plans generally available to the other executives of the Company, as may be maintained by the Company from time to time, and is eligible for equity awards under the Company's equity incentive plans.

Pursuant to his employment agreement, if Dr. Luthringer's employment with us ends due to his resignation for "good reason," his termination by us other than for "cause" or as a result of his death or disability, he is entitled to (1) continued payment of his base salary for 12 months following his termination, (2) a pro-rated portion of his target performance bonus for the year in which the termination occurs, and (3) vesting of his outstanding stock options as to that number of the then-unvested underlying shares of common stock that would have vested over the 12-month period following the end of Dr. Luthringer's employment. If Dr. Luthringer's employment with us or our successor ends due to his resignation for "good reason" or his termination by us or our successor other than for "cause," in each case in connection with or within 12 months following a change of control of our company, Dr. Luthringer will be entitled to (1) continued payment of his base salary for 24 months following his termination, (2) 100% of his discretionary bonus for the year in which the termination occurs and (3) vesting of his outstanding stock options as to all then-unvested underlying shares of common stock. Dr. Luthringer's benefits are conditioned, among other things, on his complying with his post-termination obligations under his employment agreement.

For the purposes of Dr. Luthringer's employment agreement, Dr. Luthringer may end his employment by resignation for "good reason" if, without his written consent, there is (1) a material diminution in the nature or scope of his responsibilities, duties or authority; (2) material reduction in his base salary; (3) relocation of his principal work location more than 50 miles from the location of his principal work location as of immediately prior to such relocation; or (4) our material breach of his employment agreement. Further, for the purposes of Dr. Luthringer's employment agreements, we may terminate him for "cause" if he (1) was convicted of a felony or a misdemeanor involving moral turpitude, (2) committed an act of fraud or embezzlement against us or our affiliates, (3) materially breached his employment agreement and failed to cure such breach within 30 days, (4) materially violated any of our written policies and failed to cure such violation within 30 days, (5) materially failed or materially refused to substantially perform his duties (other than by reason of a physical or mental impairment) or to implement the lawful written directives of our Chief Executive Officer or our board of

directors that are consistent with his position, and such material failure or material refusal has continued after 30 days, (6) willfully engaged in conduct or willfully omitted to take any action, resulting in material injury to us or our affiliates, monetarily or otherwise (including with respect to our ability to comply with our legal or regulatory obligations), or (7) materially breached his fiduciary duties as our officer or as a member of our board of directors.

Geoffrey Race

We entered into an Amended and Restated Employment Agreement with Mr. Race through our wholly owned subsidiary, Mind-NRG SARL, in August 2016 setting forth the terms of his employment. Mr. Race's principal place of work is in Cambridge, United Kingdom. In 2019, Mr. Race was entitled to an annual base salary of \$410,900, which increased to an annual base salary of \$427,336, starting on January 1, 2020. Mr. Race is also eligible to receive a discretionary bonus payment for each calendar year that ends during his employment of up to 50% of his base salary for that calendar year. Mr. Race is also eligible to participate in the Company's employee benefit, welfare and other plans generally available to the other executives of the Company, as may be maintained by the Company from time to time, and is eligible for equity awards under the Company's equity incentive plans.

Pursuant to his employment agreement, if Mr. Race's employment with us ends due to his resignation for "good reason," his termination by us other than for "cause" or as a result of his death or disability, he is entitled to (1) continued payment of his base salary for 12 months following his termination, (2) a pro-rated portion of his target performance bonus for the year in which the termination occurs, and (3) vesting of his outstanding stock options as to that number of the then-unvested underlying shares of common stock that would have vested over the 12-month period following the end of Mr. Race's employment. If Mr. Race's employment with us or our successor ends due to his resignation for "good reason" or his termination by us or our successor other than for "cause," in each case in connection with or within 12 months following a change of control of our company, Mr. Race will be entitled to (1) continued payment of his base salary for 12 months following his termination, (2) a severance payment of an amount equal to 12 months' of his base salary, (3) 100% of his discretionary bonus for the year in which the termination occurs and (4) vesting of his outstanding stock options as to all then-unvested underlying shares of common stock. Mr. Race's benefits are conditioned, among other things, on his complying with his post-termination obligations under his employment agreement.

For the purposes of Mr. Race's employment agreement, Mr. Race may end his employment by resignation for "good reason" if, without Mr. Race's written consent, there is (1) a material diminution in the nature or scope of his responsibilities, duties or authority; (2) material reduction in his base salary; (3) relocation of his principal work location more than 50 miles from the location of his principal work location as of immediately prior to such relocation; or (4) our material breach of his employment agreement. Further, for the purposes of Mr. Race's employment agreement, we may terminate him for "cause" if he (1) was convicted of a felony or a misdemeanor involving moral turpitude, (2) committed an act of fraud or embezzlement against us or our affiliates, (3) materially breached his employment agreement and failed to cure such breach within 30 days, (4) materially violated any of our written policies and failed to cure such violation within 30 days, (5) materially failed or materially refused to substantially perform his duties (other than by reason of a physical or mental impairment) or to implement the lawful written directives of our Chief Executive Officer or our board of directors that are consistent with his position, and such material failure or material refusal has continued after 30 days, (6) willfully engaged in conduct or willfully omitted to take any action, resulting in material injury to us or our affiliates, monetarily or otherwise (including with respect to our ability to comply with our legal or regulatory obligations), or (7) materially breached his fiduciary duties as our officer.

Richard Russell

We entered into an Offer Letter with Mr. Russell on October 31, 2017 setting forth the terms of his employment with the Company. The Offer Letter does not provide for a specified term of employment and Mr. Russell's employment is on an at-will basis, subject to the payment of severance in certain circumstances as described below.

In 2019, Mr. Russell was entitled to an annual base salary of \$491,600, which increased to an annual base salary of \$506,348, starting on January 1, 2020. Mr. Russell is also eligible to receive a discretionary bonus payment for each calendar year during which he is employed of up to 50% of his base salary for that calendar year. Mr. Russell is also eligible to participate in the Company's employee benefit, welfare and other plans generally available to the other executives of the Company, as may be maintained by the Company from time to time, and is eligible for equity awards under the Company's equity incentive plans.

Pursuant to the terms of the Offer Letter, if Mr. Russell is terminated by the Company for a reason other than retirement, death, disability or Cause (as defined in the Offer Letter), or if Mr. Russell terminates his employment for Good Reason (as defined in the Offer Letter), then Mr. Russell will be entitled to receive a severance payment equal to the continued payment of 12 months of Mr. Russell's annualized base salary at the time of termination. In addition, in the event of a termination by the Company for a reason other than Cause, the Company will continue to pay the pro-rata portion of his annual bonus for the year of such termination (assuming that the annual bonus is equal to 50% of his base salary at the time of termination).

Furthermore, pursuant to the terms of the Offer Letter, if Mr. Russell is terminated by the Company without Cause (as defined in the Offer Letter) or if he terminates his employment for Good Reason (as defined in the Offer letter) within 12 months immediately following a Change in Control (as defined in the Offer Letter), then Mr. Russell will be entitled to receive a severance payment equal to the continued payment of 18 months of Mr. Russell's annualized base salary at the time of termination as well as a payment equal to the full annual bonus for the performance year in which his termination occurs, payable as a lump sum.

Payments Upon a Change in Control

In addition to payments and benefits under their employment or consultant agreements described above, pursuant to the terms of our Amended and Restated 2013 Equity Incentive Plan, if one or more of the options granted to our named executive officers are not assumed or otherwise continued in effect by the successor corporation in the event of a change in control, such options would automatically accelerate and vest in full immediately prior to the change in control.

Confidentiality and Assignment Agreements

Each of the employment or offer agreements with our named executive officers contains provisions with respect to confidential information and assignment of inventions. Among other things, each agreement obligates each named executive officer to refrain from disclosing any of our proprietary information received during the course of employment or service with us and to assign to us any inventions conceived or developed during the course of employment or service with us.

DIRECTOR COMPENSATION

2019 Director Compensation Table

The following table presents the total compensation for each person other than our Chief Executive Officer who served as a member of our Board during 2019. Other than as set forth in the table and described more fully below, we did not pay any compensation, reimburse any expense of, make any equity awards or non-equity awards to, or pay any other compensation to any of the non-employee members of our Board in 2019.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (1) (\$)	All Other Compensation (\$)	Total (\$)
William F. Doyle	64,500	125,303		189,803
Hans Peter Hasler	45,000	66,197	_	111,197
Jeryl Hilleman	46,250	66,197	_	112,447
Dr. David Kupfer	43,000	66,197	_	109,197
Dr. Fouzia Laghrissi-Thode	41,000	66,197	_	107,197
Jan van Heek	46,250	66,197	_	112,447

⁽¹⁾ In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during 2019 computed in accordance with FASB ASC Topic 718. The assumptions we used in valuing the option awards are described in Note 8 to our consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 9, 2020. The aggregate grant date fair value does not take into account any estimated forfeitures related to service-vesting conditions. These amounts do not reflect the actual economic value that will be realized by a director upon the vesting of the stock options, the exercise of the stock options or the sale of the common stock underlying such stock options.

As of December 31, 2019, the aggregate number of shares subject to outstanding equity awards held by our non-employee directors who served on our Board during 2019 was:

<u>Name</u>	Stock Options
William F. Doyle	120,000
Hans Peter Hasler	80,000
Jeryl Hilleman	60,000
Dr. David Kupfer	90,000
Dr. Fouzia Laghrissi-Thode	90,000
Jan van Heek	124,467

Non-Employee Director Compensation Policy

Our Amended and Restated Non-Employee Director Compensation Plan, as adopted by our Board became effective April 1, 2018. Under the terms of the current plan, each non-employee director is eligible to receive an annual cash retainer of \$35,000 and the non-employee chairperson of the Board is eligible to receive an additional annual cash retainer of \$10,000. The chairpersons of the Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee are each eligible to receive additional annual cash retainers of \$15,000, \$12,000 and \$8,000, respectively. Other members of the Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee are eligible to receive additional annual cash retainers of \$7,500, \$6,000 and \$4,000, respectively. Under the terms of the current plan, each newly elected non-employee member of the Board is also eligible to receive a one-time grant of an option to purchase 40,000 shares of common stock promptly following election or appointment to the Board, or the New Director Welcome Options.

The New Director Welcome Options vest quarterly over three years, provided that the applicable non-employee director is, as of such vesting date, then a director of the Company. In addition, each non-employee director is eligible to receive an annual option grant to purchase 20,000 shares of common stock per year, or the New Annual Grants. The New Annual Grants vest in equal quarterly installments over one year, provided that the applicable non-employee director is, as of such vesting date, then a director of the Company.

TRANSACTIONS WITH RELATED PERSONS RELATED PERSON TRANSACTIONS POLICY AND PROCEDURES

We have adopted a related person transaction policy that sets forth our procedures for the identification, review, consideration, and approval or ratification of related person transactions. For purposes of our policy only, a related person transaction is a transaction, arrangement, or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were, or will be participants in which the amount involved exceeds \$120,000. Transactions involving compensation for services provided to us as an employee or director are not covered by this policy. A related person is any executive officer, director, or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated, or any transaction that was not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our Audit Committee, or, if Audit Committee approval would be inappropriate, to another independent body of our Board, for review, consideration, and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party, or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related person transactions and to effectuate the terms of the policy. In addition, under our Code of Ethics, our employees and directors have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest.

In considering related person transactions, our Audit Committee, or other independent body of our Board, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs, and benefits to us;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- · the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties, or to or from employees generally.

The policy requires that, in determining whether to approve, ratify, or reject a related person transaction, our Audit Committee, or other independent body of our Board, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our Audit Committee, or other independent body of our Board, determines in the good faith exercise of its discretion.

All of the transactions described below under "Certain Related Person Transactions" were approved by the Audit Committee in accordance with our related person transaction policy.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Other than the compensation agreements and other arrangements described under "Executive Compensation" and "Director Compensation" in this proxy statement and the transactions set forth below, since January 1, 2019, there has not been any transaction or series of transactions to which we were or are a party in which the amount involved exceeded or exceeds \$120,000, and in which any of our directors, executive officers or holders of more than 5% of any class of our voting securities, or any members of their immediate family, had or will have a direct or indirect material interest. We believe the transactions set forth below were executed on terms no less favorable to us than we could have obtained from unaffiliated third parties.

Arrangement with PPRS Research, Inc.

Dr. Jay B. Saoud, the Company's Senior Vice President, Head of Research and Development, provides part-time consulting services to PPRS Research, Inc., where he serves as Head of Biometrics, Pharmacokinetics, and Medical Writing. In the last fiscal year, the Company paid PPRS Research, Inc. approximately \$4.6 million for program and project management services, including research and development services and coordination with investigators and contract research organizations.

Arrangement with V-Watch SA

We entered into an agreement, under which we will pay approximately \$380,000 to license a device for monitoring sleep from V-Watch SA, or V-Watch, for use in certain of our clinical trials. Dr. Luthringer is the Chairman of the Board of Directors of V- Watch and funds affiliated with Index Ventures hold greater than 10% of the outstanding capital stock of V- Watch. Dr. Luthringer does not receive compensation from V-Watch and will not receive any consideration as a result of our payments to V-Watch in connection with our clinical trials, nor will funds affiliated with Index Ventures.

Equity Awards

For more information regarding stock option awards granted to our named executive officers and directors, see the sections entitled "Executive Compensation—Outstanding Equity Awards at Fiscal Year End" and "Director Compensation."

Indemnification Agreements

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

Registration Rights

Funds affiliated with Index Ventures are party to an investor rights agreement providing for rights to register under the Securities Act of 1933, as amended, certain shares of our capital stock after the expiration of the 180-day period following the completion of our IPO (as may be extended under certain circumstances).

EQUITY COMPENSATION PLAN INFORMATION

The following table provides certain information with respect to all of the Company's equity compensation plans in effect as of December 31, 2019.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, stock appreciation rights, stock awards and restricted stock units(a)	Weighted- average exercise price of outstanding options, stock appreciation rights, stock awards and restricted stock units	Number of securities remaining available for issuance under equity compensation plans (1) (excluding securities reflected in column(a))
Equity compensation plans approved by security holders	8,313,978	\$ 6.94	139,998
Equity compensation plans not approved by security holders	795,000(1)	\$ 5.90	<u> </u>
Total	9,108,978	\$ 6.85	139,998

⁽¹⁾ Consists of 775,000 shares of common stock underlying an "inducement award" pursuant to Nasdaq Listing Rule 5635(c) in the form of a stock option award, and 20,000 shares of common stock underlying an "inducement award" pursuant to Nasdaq Listing Rule 5635(c) in the form of a restricted stock unit award, each granted to the Company's President on December 11, 2017.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for Notices of Internet Availability of Proxy Materials or other Annual Meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other Annual Meeting materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Minerva Neurosciences, Inc. stockholders will be "householding" the Company's proxy materials. A single Notice of Internet Availability of Proxy Materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they 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 Notice of Internet Availability of Proxy Materials, please notify your broker or the Company. Direct your written request to Minerva Neurosciences, Inc. to the attention of our Corporate Secretary, 1601 Trapelo Road, Suite 286, Waltham, MA 02451, or contact our Corporate Secretary at (617) 600-7373. Stockholders who currently receive multiple copies of the Notices of Internet Availability of Proxy Materials at their addresses and would like to request "householding" of their communications should contact their brokers.

OTHER MATTERS

The Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board

/s/ Devin Smith Devin Smith Corporate Secretary

April 28, 2019

A copy of the Company's Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2019 is available without charge upon written request to: Corporate Secretary, Minerva Neurosciences, Inc., 1601 Trapelo Road, Suite 286, Waltham, MA 02451.

\boldsymbol{M} inerva N eurosciences , I nc . A mended and R estated 2013 E quity I ncentive P lan

A DOPTED BY B OARD OF D IRECTORS ON: D ECEMBER 19, 2013
A PPROVED BY THE S TOCKHOLDERS ON: D ECEMBER 19, 2013
A MENDED AND R ESTATED BY THE B OARD OF D IRECTORS ON: A PRIL 29, 2014
A MENDMENT AND R ESTATEMENT A PPROVED BY THE S TOCKHOLDERS ON: J UNE 2, 2014
A MENDED AND RESTATED BY THE B OARD OF D IRECTORS ON: A PRIL 21, 2018
A MENDMENT AND R ESTATEMENT A PPROVED BY THE S TOCKHOLDERS ON: J UNE 7, 2018
A MENDED AND RESTATED BY THE B OARD OF D IRECTORS ON: A PRIL 17, 2020
A MENDMENT AND R ESTATEMENT A PPROVED BY THE S TOCKHOLDERS ON: J UNE 19, 2020

T ABLE OF C ONTENTS

		<u>Page</u>
1.	<u>G eneral</u>	1
2.	S HARES S UBJECT TO THE P LAN	1
3.	E LIGIBILITY AND L IMITATIONS	2
4.	O PTIONS AND S TOCK A PPRECIATION R IGHTS	3
5.	A WARDS O THER T HAN O PTIONS AND S TOCK A PPRECIATION R IGHTS	6
6.	A DJUSTMENTS UPON C HANGES IN C OMMON S TOCK; O THER C ORPORATE E VENTS	7
7.	A DMINISTRATION	9
8.	T AX W ITHHOLDING	11
9.	M ISCELLANEOUS	12
10.	C OVENANTS OF THE C OMPANY	14
11.	S EVERABILITY	14
12.	T ERMINATION OF THE P LAN	14
13.	<u>D EFINITIONS</u>	15

1. GENERAL.

- (a) Successor to and Continuation of Prior Plan. The Plan is the successor to and continuation of the Prior Plan. As of the Effective Date, (i) no additional awards may be granted under the Prior Plan; (ii) the Prior Plan's Available Reserve plus any Returning Shares will become available for issuance pursuant to Awards granted under this Plan; and (iii) all outstanding Awards granted under the Prior Plan will remain subject to the terms of the Prior Plan (except to the extent such outstanding awards result in Returning Shares that become available for issuance pursuant to Awards granted under this Plan). All Awards granted under this Plan will be subject to the terms of this Plan.
- **(b) Plan Purpose.** The Company, by means of the Plan, seeks to secure and retain the services of Employees, Directors and Consultants, to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such persons may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.
- (c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) SARs; (iv) Restricted Stock Awards; (v) RSU Awards; (vi) Performance Awards; and (vii) Other Awards.
 - **(d) Effective Date.** The Plan will come into existence on the Effective Date.

2. S HARES S UBJECT TO THE P LAN.

- (a) Share Reserve. Subject to any adjustments as necessary to implement any Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Awards will not exceed the sum of (i) 2,000,000 new shares, plus (ii) the Prior Plan's Available Reserve; plus, (iii) the number of Returning Shares, if any, as such shares become available from time to time.
- **(b) Aggregate Incentive Stock Option Limit.** Notwithstanding anything to the contrary in Section 2(a) and subject to any adjustments as necessary to implement any Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is 25,000,000 shares.

(c) Share Reserve Operation.

- (i) Limit Applies to Common Stock Issued Pursuant to Awards. For clarity, the Share Reserve is a limit on the number of shares of Common Stock that may be issued pursuant to Awards and does not limit the granting of Awards, except that the Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy its obligations to issue shares pursuant to such Awards. Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, Nasdaq Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, NYSE American Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.
- (ii) Actions that Do Not Constitute Issuance of Common Stock and Do Not Reduce Share Reserve. The following actions do not result in an issuance of shares under the Plan and accordingly do not reduce the number of shares subject to the Share Reserve and available for issuance under the Plan: (1) the expiration or termination of any portion of an Award without the shares covered by such portion of the Award having been issued, or (2) the settlement of any portion of an Award in cash (*i.e.* , the Participant receives cash rather than Common Stock).
- (iii) Reversion of Previously Issued Shares of Common Stock to Share Reserve. Any shares of Common Stock previously issued pursuant to an Award that are forfeited back to or repurchased by the Company because of a failure to meet a contingency or condition required for the vesting of such shares will be added back to the Share Reserve and again become available for issuance under the Plan.

(iv) Shares Not Available For Subsequent Issuance. Any shares of Common Stock reacquired or withheld (or not issued) by the Company to satisfy the exercise or purchase price of an Award will no longer be available for issuance under the Plan, including any shares subject to an Award that are not delivered to a Participant because such Award is settled through a reduction of shares subject to such Award. In addition, any shares reacquired or withheld (or not issued) by the Company to satisfy a tax withholding obligation in connection with an Award, or any shares repurchased by the Company on the open market with the proceeds from the exercise or purchase price of an Award will no longer be available for issuance under the Plan.

3. E LIGIBILITY AND L IMITATIONS.

- (a) Eligible Award Recipients. Subject to the terms of the Plan, Employees, Directors and Consultants are eligible to receive Awards.
- (b) Specific Award Limitations
- **(i) Limitations on Incentive Stock Option Recipients.** Incentive Stock Options may be granted only to Employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and (f) of the Code).
- (ii) Incentive Stock Option \$100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).
- (iii) Limitations on Incentive Stock Options Granted to Ten Percent Stockholders. A Ten Percent Stockholder may not be granted an Incentive Stock Option unless (i) the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant of such Option and (ii) the Option is not exercisable after the expiration of five years from the date of grant of such Option.
- **(iv) Limitations on Nonstatutory Stock Options and SARs.** Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company (as such term is defined in Rule 405) unless the stock underlying such Awards is treated as "service recipient stock" under Section 409A because the Awards are granted pursuant to a corporate transaction (such as a spin off transaction) or unless such Awards otherwise comply with the distribution requirements of Section 409A.
- (v) Dividends and Dividend Equivalents. Dividends or dividend equivalents may be paid or credited, as applicable, with respect to any shares of Common Stock subject to an Award, as determined by the Board and contained in the applicable Award Agreement; provided, however, that (i) no dividends or dividend equivalents may be paid with respect to any such shares before the date such shares have vested under the terms of such Award Agreement, (ii) any dividends or dividend equivalents that are credited with respect to any such shares will be subject to all of the terms and conditions applicable to such shares under the terms of such Award Agreement (including, but not limited to, any vesting conditions), and (iii) any dividends or dividend equivalents that are credited with respect to any such shares will be forfeited to the Company on the date, if any, such shares are forfeited to or repurchased by the Company due to a failure to meet any vesting conditions under the terms of such Award Agreement.
- (vi) Minimum Vesting Requirements . The vesting period for each Award granted following the Effective Date, other than an Excepted Award (as defined below), must be at least equal to twelve months; provided, however, nothing in this Section 3(b)(vi) shall limit the Administrator's authority to accelerate the vesting of Awards as set forth in Section 6 or Section 7; and, provided further, notwithstanding the

foregoing, (i) up to 5% of the shares of Common Stock authorized for issuance under the Plan may be utilized for Awards with a vesting period that is less than twelve months, (ii) Awards may granted as substitute Awards in replacement of other Awards (or awards previously granted by an entity being acquired (or assets of which are being acquired)) that were scheduled to vest within the twelve month period following the grant date or (iii) Awards may be granted in connection with an elective deferral of cash compensation that, absent a deferral election, otherwise would have been paid to the grantee within the twelve month period following the grant date (each such Award, an "*Excepted Award*").

- (c) Aggregate Incentive Stock Option Limit. The aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is the number of shares specified in Section 2(b).
- (d) Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director with respect to any calendar year, including Awards granted and cash fees paid by the Company to such Non-Employee Director, will not exceed (i) \$500,000 in total value or (ii) in the event such Non-Employee Director is first appointed or elected to the Board during such calendar year, \$750,000 in total value, in each case calculating the value of any equity awards based on the grant date fair value of such equity awards for financial reporting purposes.

4. O PTIONS AND S TOCK A PPRECIATION R IGHTS.

Each Option and SAR will have such terms and conditions as determined by the Board. Each Option will be designated in writing as an Incentive Stock Option or Nonstatutory Stock Option at the time of grant; provided, however, that if an Option is not so designated, then such Option will be a Nonstatutory Stock Option, and the shares purchased upon exercise of each type of Option will be separately accounted for. Each SAR will be denominated in shares of Common Stock equivalents. The terms and conditions of separate Options and SARs need not be identical; provided, however, that each Option Agreement and SAR Agreement will conform (through incorporation of provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

- (a) **Term.** Subject to Section 3(b)(iii) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of grant of such Award or such shorter period specified in the Award Agreement.
- **(b) Exercise or Strike Price.** Subject to Section 3(b)(iii) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value on the date of grant of such Award. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value on the date of grant of such Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Change in Control and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code.
- **(c) Exercise Procedure and Payment of Exercise Price for Options.** In order to exercise an Option, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the Option Agreement or otherwise provided by the Company. The Board has the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The exercise price of an Option may be paid, to the extent permitted by Applicable Law and as determined by the Board, by one or more of the following methods of payment to the extent set forth in the Option Agreement:
 - (i) by cash or check, bank draft or money order payable to the Company;
 - (ii) pursuant to a "cashless exercise" program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the Common Stock subject to the Option, results in

either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the exercise price to the Company from the sales proceeds;

- (iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock that are already owned by the Participant free and clear of any liens, claims, encumbrances or security interests, with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) at the time of exercise the Common Stock is publicly traded, (2) any remaining balance of the exercise price not satisfied by such delivery is paid by the Participant in cash or other permitted form of payment, (3) such delivery would not violate any Applicable Law or agreement restricting the redemption of the Common Stock, (4) any certificated shares are endorsed or accompanied by an executed assignment separate from certificate, and (5) such shares have been held by the Participant for any minimum period necessary to avoid adverse accounting treatment as a result of such delivery;
- **(iv)** if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) such shares used to pay the exercise price will not be exercisable thereafter and (2) any remaining balance of the exercise price not satisfied by such net exercise is paid by the Participant in cash or other permitted form of payment; or
 - (v) in any other form of consideration that may be acceptable to the Board and permissible under Applicable Law.
- (d) Exercise Procedure and Payment of Appreciation Distribution for SARs. In order to exercise any SAR, the Participant must provide notice of exercise to the Plan Administrator in accordance with the SAR Agreement. The appreciation distribution payable to a Participant upon the exercise of a SAR will not be greater than an amount equal to the excess of (i) the aggregate Fair Market Value on the date of exercise of a number of shares of Common Stock equal to the number of Common Stock equivalents that are vested and being exercised under such SAR, over (ii) the strike price of such SAR. Such appreciation distribution may be paid to the Participant in the form of Common Stock or cash (or any combination of Common Stock and cash) or in any other form of payment, as determined by the Board and specified in the SAR Agreement.
- **(e) Transferability.** Options and SARs may not be transferred to third party financial institutions for value. The Board may impose such additional limitations on the transferability of an Option or SAR as it determines. In the absence of any such determination by the Board, the following restrictions on the transferability of Options and SARs will apply, provided that except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration and *provided*, *further*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer:
 - (i) Restrictions on Transfer. An Option or SAR will not be transferable, except by will or by the laws of descent and distribution, and will be exercisable during the lifetime of the Participant only by the Participant; provided, however, that the Board may permit transfer of an Option or SAR in a manner that is not prohibited by applicable tax and securities laws upon the Participant's request, including to a trust if the Participant is considered to be the sole beneficial owner of such trust (as determined under Section 671 of the Code and applicable state law) while such Option or SAR is held in such trust, provided that the Participant and the trustee enter into a transfer and other agreements required by the Company.
 - (ii) **Domestic Relations Orders.** Notwithstanding the foregoing, subject to the execution of transfer documentation in a format acceptable to the Company and subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to a domestic relations order.
- **(f) Vesting.** Subject to Section 3(b)(vi), the Board may impose such restrictions on or conditions to the vesting and/or exercisability of an Option or SAR as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Options and SARs will cease upon termination of the Participant's Continuous Service.

- **(g) Termination of Continuous Service for Cause.** Except as explicitly otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service is terminated for Cause, the Participant's Options and SARs will terminate and be forfeited immediately upon such termination of Continuous Service, and the Participant will be prohibited from exercising any portion (including any vested portion) of such Awards on and after the date of such termination of Continuous Service and the Participant will have no further right, title or interest in such forfeited Award, the shares of Common Stock subject to the forfeited Award, or any consideration in respect of the forfeited Award.
- **(h) Post-Termination Exercise Period Following Termination of Continuous Service for Reasons Other than Cause.** Subject to Section 4(i), if a Participant's Continuous Service terminates for any reason other than for Cause, the Participant may exercise his or her Option or SAR to the extent vested, but only within the following period of time or, if applicable, such other period of time provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate; provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)):
 - (i) three months following the date of such termination if such termination is a termination without Cause (other than any termination due to the Participant's Disability or death);
 - (ii) 12 months following the date of such termination if such termination is due to the Participant's Disability;
 - (iii) 18 months following the date of such termination if such termination is due to the Participant's death; or
 - (iv) 18 months following the date of the Participant's death if such death occurs following the date of such termination but during the period such Award is otherwise exercisable (as provided in (i) or (ii) above).

Following the date of such termination, to the extent the Participant does not exercise such Award within the applicable Post-Termination Exercise Period (or, if earlier, prior to the expiration of the maximum term of such Award), such unexercised portion of the Award will terminate, and the Participant will have no further right, title or interest in the terminated Award, the shares of Common Stock subject to the terminated Award, or any consideration in respect of the terminated Award.

- (i) Restrictions on Exercise; Extension of Exercisability. A Participant may not exercise an Option or SAR at any time that the issuance of shares of Common Stock upon such exercise would violate Applicable Law. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason other than for Cause and, at any time during the last thirty days of the applicable Post-Termination Exercise Period: (i) the exercise of the Participant's Option or SAR would be prohibited solely because the issuance of shares of Common Stock upon such exercise would violate Applicable Law, or (ii) the immediate sale of any shares of Common Stock issued upon such exercise would violate the Company's Trading Policy, then the applicable Post-Termination Exercise Period will be extended to the last day of the calendar month that commences following the date the Award would otherwise expire, with an additional extension of the exercise period to the last day of the next calendar month to apply if any of the foregoing restrictions apply at any time during such extended exercise period, generally without limitation as to the maximum permitted number of extensions); provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)).
- (j) Non-Exempt Employees . No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, will be first exercisable for any shares of Common Stock until at least six months following the date of grant of such Award. Notwithstanding the foregoing, in accordance with the provisions of the Worker Economic Opportunity Act, any vested portion of such Award may be exercised earlier than six months following the date of grant of such Award in the event of (i) such Participant's death or Disability, (ii) a Change in Control in which such Award is not assumed, continued or substituted, or (iii) such Participant's retirement (as such term may be defined in the

Award Agreement or another applicable agreement or, in the absence of any such definition, in accordance with the Company's then current employment policies and guidelines). This Section 4(j) is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(k) Whole Shares . Options and SARs may be exercised only with respect to whole shares of Common Stock or their equivalents.

5. A WARDS O THER T HAN O PTIONS AND S TOCK A PPRECIATION R IGHTS.

(a) Restricted Stock Awards and RSU Awards. Each Restricted Stock Award and RSU Award will have such terms and conditions as determined by the Board; provided, however, that each Restricted Stock Award Agreement and RSU Award Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(i) Form of Award.

- (1) RSAs: To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock subject to a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until such shares become vested or any other restrictions lapse, or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. Unless otherwise determined by the Board, a Participant will have voting and other rights as a stockholder of the Company with respect to any shares subject to a Restricted Stock Award.
- (2) RSUs: A RSU Award represents a Participant's right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units subject to the RSU Award. As a holder of a RSU Award, a Participant is an unsecured creditor of the Company with respect to the Company's unfunded obligation, if any, to issue shares of Common Stock in settlement of such Award and nothing contained in the Plan or any RSU Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between a Participant and the Company or an Affiliate or any other person. A Participant will not have voting or any other rights as a stockholder of the Company with respect to any RSU Award (unless and until shares are actually issued in settlement of a vested RSU Award).

(ii) Consideration.

- (1) RSA: A Restricted Stock Award may be granted in consideration for (A) cash or check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of consideration (including future services) as the Board may determine and permissible under Applicable Law.
- (2) RSU: Unless otherwise determined by the Board at the time of grant, a RSU Award will be granted in consideration for the Participant's services to the Company or an Affiliate, such that the Participant will not be required to make any payment to the Company (other than such services) with respect to the grant or vesting of the RSU Award, or the issuance of any shares of Common Stock pursuant to the RSU Award. If, at the time of grant, the Board determines that any consideration must be paid by the Participant (in a form other than the Participant's services to the Company or an Affiliate) upon the issuance of any shares of Common Stock in settlement of the RSU Award, such consideration may be paid in any form of consideration as the Board may determine and permissible under Applicable Law.
- (iii) Vesting. Subject to Section 3(b)(vi), the Board may impose such restrictions on or conditions to the vesting of a Restricted Stock Award or RSU Award as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Restricted Stock Awards and RSU Awards will cease upon termination of the Participant's Continuous Service.

- **(iv) Termination of Continuous Service.** Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason, (i) the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant under his or her Restricted Stock Award that have not vested as of the date of such termination as set forth in the Restricted Stock Award Agreement and (ii) any portion of his or her RSU Award that has not vested will be forfeited upon such termination and the Participant will have no further right, title or interest in the RSU Award, the shares of Common Stock issuable pursuant to the RSU Award, or any consideration in respect of the RSU Award.
- (v) Dividends and Dividend Equivalents. Subject to Section 3(b)(v), dividends or dividend equivalents may be paid or credited, as applicable, with respect to any shares of Common Stock subject to a Restricted Stock Award or RSU Award, as determined by the Board and specified in the Award Agreement.
- **(vi) Settlement of RSU Awards** . A RSU Award may be settled by the issuance of shares of Common Stock or cash (or any combination thereof) or in any other form of payment, as determined by the Board and specified in the RSU Award Agreement. At the time of grant, the Board may determine to impose such restrictions or conditions that delay such delivery to a date following the vesting of the RSU Award.
- **(b) Performance Awards** . With respect to any Performance Award and subject to Section 3(b)(vi), the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, the other terms and conditions of such Award, and the measure of whether and to what degree such Performance Goals have been attained will be determined by the Board.
- (c) Other Awards . Other forms of Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value at the time of grant) may be granted either alone or in addition to Awards provided for under Section 4 and the preceding provisions of this Section 5. Subject to the provisions of the Plan (including, but not limited to, Section 3(b)(vi)), the Board will have sole and complete discretion to determine the persons to whom and the time or times at which such Other Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Awards and all other terms and conditions of such Other Awards.

6. A DJUSTMENTS UPON C HANGES IN C OMMON S TOCK; O THER C ORPORATE E VENTS.

- (a) Capitalization Adjustments . In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of shares of Common Stock subject to the Plan pursuant to Section 2(a), (ii) the class(es) and maximum number of shares that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 2(a), and (iii) the class(es) and number of securities and exercise price, strike price or purchase price of Common Stock subject to outstanding Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. Notwithstanding the foregoing, no fractional shares or rights for fractional shares of Common Stock shall be created in order to implement any Capitalization Adjustment. The Board shall determine an appropriate equivalent benefit, if any, for any fractional shares or rights to fractional shares that might be created by the adjustments referred to in the preceding provisions of this Section.
- **(b) Dissolution or Liquidation**. Except as otherwise provided in the Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Award is providing Continuous

Service, provided, however, that the Board may determine to cause some or all Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

- **(c) Change in Control.** The following provisions will apply to Awards in the event of a Change in Control unless otherwise provided in the instrument evidencing the Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of an Award.
 - (i) Awards May Be Assumed. In the event of a Change in Control, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue any or all Awards outstanding under the Plan or may substitute similar awards for Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Change in Control), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Change in Control. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of an Award or substitute a similar award for only a portion of an Award, or may choose to assume or continue the Awards held by some, but not all Participants. The terms of any assumption, continuation or substitution will be set by the Board.
 - (ii) Awards Held by Current Participants. In the event of a Change in Control in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous Service has not terminated prior to the effective time of the Change in Control (referred to as the "Current Participants"), the vesting of such Awards (and, with respect to Options and Stock Appreciation Rights, the time when such Awards may be exercised) will be accelerated in full to a date prior to the effective time of such Change in Control (contingent upon the effectiveness of the Change in Control) as the Board determines (or, if the Board does not determine such a date, to the date that is five (5) days prior to the effective time of the Change in Control), and such Awards will terminate if not exercised (if applicable) at or prior to the effective time of the Change in Control, and any reacquisition or repurchase rights held by the Company with respect to such Awards will lapse (contingent upon the effectiveness of the Change in Control). With respect to the vesting of Performance Awards that will accelerate upon the occurrence of a Change in Control pursuant to this subsection (ii) and that have multiple vesting levels depending on the level of performance, unless otherwise provided in the Award Agreement, the vesting of such Performance Awards will accelerate at 100% of the target level upon the occurrence of the Change in Control. With respect to the vesting of Awards that will accelerate upon the occurrence of a Change in Control pursuant to this subsection (ii) and are settled in the form of a cash payment, such cash payment will be made no later than 30 days following the occurrence of the Change in Control.
 - (iii) Awards Held by Persons other than Current Participants. In the event of a Change in Control in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by persons other than Current Participants, such Awards will terminate if not exercised (if applicable) prior to the occurrence of the Change in Control; provided, however, that any reacquisition or repurchase rights held by the Company with respect to such Awards will not terminate and may continue to be exercised notwithstanding the Change in Control.
 - **(iv) Payment for Awards in Lieu of Exercise.** Notwithstanding the foregoing, in the event an Award will terminate if not exercised prior to the effective time of a Change in Control, the Board may provide, in its sole discretion, that the holder of such Award may not exercise such Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the

excess, if any, of (1) the value of the property the Participant would have received upon the exercise of the Award (including, at the discretion of the Board, any unvested portion of such Award), over (2) any exercise price payable by such holder in connection with such exercise.

- **(d) Appointment of Stockholder Representative.** As a condition to the receipt of an Award under this Plan, a Participant will be deemed to have agreed that the Award will be subject to the terms of any agreement governing a Change in Control involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on the Participant's behalf with respect to any escrow, indemnities and any contingent consideration.
- (e) No Restriction on Right to Undertake Transactions . The grant of any Award under the Plan and the issuance of shares pursuant to any Award does not affect or restrict in any way the right or power of the Company or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of stock or of options, rights or options to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. A DMINISTRATION.

- **(a) Administration by Board.** The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in subsection (c) below.
 - **(b) Powers of Board.** The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:
 - (i) To determine from time to time (1) which of the persons eligible under the Plan will be granted Awards; (2) when and how each Award will be granted; (3) what type or combination of types of Award will be granted; (4) the provisions of each Award granted (which need not be identical), including the time or times when a person will be permitted to receive an issuance of Common Stock or other payment pursuant to an Award; (5) the number of shares of Common Stock or cash equivalent with respect to which an Award will be granted to each such person; and (6) the Fair Market Value applicable to an Award.
 - (ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement, in a manner and to the extent it deems necessary or expedient to make the Plan or Award fully effective.
 - (iii) To settle all controversies regarding the Plan and Awards granted under it.
 - (iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest, notwithstanding the provisions in the Award Agreement stating the time at which it may first be exercised or the time during which it will vest.
 - **(v)** To prohibit the exercise of any Option, SAR or other exercisable Award during a period of up to 30 days prior to the consummation of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock including any Change in Control, for reasons of administrative convenience.
 - (vi) To suspend or terminate the Plan at any time. Suspension or termination of the Plan will not Materially Impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

- (vii) To amend the Plan in any respect the Board deems necessary or advisable; provided, however, that stockholder approval will be required for any amendment to the extent required by Applicable Law. Except as provided above, rights under any Award granted before amendment of the Plan will not be Materially Impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.
 - (viii) To submit any amendment to the Plan for stockholder approval.
- (ix) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that, a Participant's rights under any Award will not be Materially Impaired by any such amendment unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.
- (x) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.
- (xi) To adopt such procedures and sub-plans as are necessary or appropriate to permit and facilitate participation in the Plan by, or take advantage of specific tax treatment for Awards granted to, Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement to ensure or facilitate compliance with the laws of the relevant foreign jurisdiction).

(c) Delegation to Committee.

- (i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to another Committee or a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Each Committee may retain the authority to concurrently administer the Plan with Committee or subcommittee to which it has delegated its authority hereunder and may, at any time, revest in such Committee some or all of the powers previously delegated. The Board may retain the authority to concurrently administer the Plan with any Committee and may, at any time, revest in the Board some or all of the powers previously delegated.
- (ii) Rule 16b-3 Compliance. To the extent an Award is intended to qualify for the exemption from Section 16(b) of the Exchange Act that is available under Rule 16b-3 of the Exchange Act, the Award will be granted by the Board or a Committee that consists solely of two or more Non-Employee Directors, as determined under Rule 16b-3(b)(3) of the Exchange Act and thereafter any action establishing or modifying the terms of the Award will be approved by the Board or a Committee meeting such requirements to the extent necessary for such exemption to remain available.
- **(d) Effect of Board 's Decision.** All determinations, interpretations and constructions made by the Board or any Committee in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.
- **(e)** Cancellation and Re-Grant of Awards. Neither the Board nor any Committee will have the authority to: (i) reduce the exercise price or strike price of any outstanding Options or SARs under the Plan, or (ii) cancel any outstanding Options or SARs that have an exercise price or strike price greater than the current Fair Market Value in exchange for cash or other Awards under the Plan, unless the stockholders of the Company have approved such an action within twelve months prior to such an event.

(f) Delegation to an Officer. The Board or any Committee may delegate to one or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by Applicable Law, other types of Awards) and, to the extent permitted by Applicable Law, the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Awards granted to such Employees; provided, however, that the resolutions or charter adopted by the Board or any Committee evidencing such delegation will specify the total number of shares of Common Stock that may be subject to the Awards granted by such Officer and that such Officer may not grant an Award to himself or herself. Any such Awards will be granted on the applicable form of Award Agreement most recently approved for use by the Board or the Committee, unless otherwise provided in the resolutions approving the delegation authority. Notwithstanding anything to the contrary herein, neither the Board nor any Committee may delegate to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) the authority to determine the Fair Market Value.

8. T AX W ITHHOLDING

- (a) Withholding Authorization. As a condition to acceptance of any Award under the Plan, a Participant authorizes withholding from payroll and any other amounts payable to such Participant, and otherwise agrees to make adequate provision for (including), any sums required to satisfy any U.S. federal, state, local and/or foreign tax or social insurance contribution withholding obligations of the Company or an Affiliate, if any, which arise in connection with the grant, exercise, vesting or settlement of such Award, as applicable. Accordingly, a Participant may not be able to exercise an Award even though the Award is vested, and the Company shall have no obligation to issue shares of Common Stock subject to an Award, unless and until such obligations are satisfied.
- **(b)** Satisfaction of Withholding Obligation. To the extent permitted by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any U.S. federal, state, local and/or foreign tax or social insurance withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; (v) by allowing a Participant to effectuate a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board, or (vi) by such other method as may be set forth in the Award Agreement.
- (c) No Obligation to Notify or Minimize Taxes; No Liability to Claims. Except as required by Applicable Law the Company has no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Award. Furthermore, the Company has no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award and will not be liable to any holder of an Award for any adverse tax consequences to such holder in connection with an Award. As a condition to accepting an Award under the Plan, each Participant (i) agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from such Award or other Company compensation and (ii) acknowledges that such Participant was advised to consult with his or her own personal tax, financial and other legal advisors regarding the tax consequences of the Award and has either done so or knowingly and voluntarily declined to do so. Additionally, each Participant acknowledges any Option or SAR granted under the Plan is exempt from Section 409A only if the exercise or strike price is at least equal to the "fair market value" of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Award. Additionally, as a condition to accepting an Option or SAR granted under the Plan, each Participant agrees not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise price or strike price is less than the "fair market value" of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

(d) Withholding Indemnification. As a condition to accepting an Award under the Plan, in the event that the amount of the Company's and/or its Affiliate's withholding obligation in connection with such Award was greater than the amount actually withheld by the Company and/or its Affiliates, each Participant agrees to indemnify and hold the Company and/or its Affiliates harmless from any failure by the Company and/or its Affiliates to withhold the proper amount.

9. M ISCELLANEOUS.

- **(a) Source of Shares.** The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.
- **(b) Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.
- (c) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action approving the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.
- (d) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Award unless and until (i) such Participant has satisfied all requirements for exercise of the Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Award is reflected in the records of the Company.
- (e) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or affect the right of the Company or an Affiliate to terminate at will and without regard to any future vesting opportunity that a Participant may have with respect to any Award (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state or foreign jurisdiction in which the Company or the Affiliate is incorporated, as the case may be. Further, nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award will constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or service or confer any right or benefit under the Award or the Plan unless such right or benefit has specifically accrued under the terms of the Award Agreement and/or Plan.
- (f) Change in Time Commitment . In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board may determine, to the extent permitted by Applicable Law, to (i) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (ii) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the

event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

- **(g) Execution of Additional Documents.** As a condition to accepting an Award under the Plan, the Participant agrees to execute any additional documents or instruments necessary or desirable, as determined in the Plan Administrator's sole discretion, to carry out the purposes or intent of the Award, or facilitate compliance with securities and/or other regulatory requirements, in each case at the Plan Administrator's request.
- (h) Electronic Delivery and Participation . Any reference herein or in an Award Agreement to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access). By accepting any Award the Participant consents to receive documents by electronic delivery and to participate in the Plan through any on-line electronic system established and maintained by the Plan Administrator or another third party selected by the Plan Administrator. The form of delivery of any Common Stock (e.g., a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.
- (i) Clawback/Recovery . All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Law and any clawback policy that the Company otherwise adopts, to the extent applicable and permissible under Applicable Law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a Participant's right to voluntary terminate employment upon a "resignation for good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.
- (j) Securities Law Compliance. A Participant will not be issued any shares in respect of an Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Each Award also must comply with other Applicable Law governing the Award, and a Participant will not receive such shares if the Company determines that such receipt would not be in material compliance with Applicable Law.
- **(k) Transfer or Assignment of Awards; Issued Shares.** Except as expressly provided in the Plan or the form of Award Agreement, Awards granted under the Plan may not be transferred or assigned by the Participant. After the vested shares subject to an Award have been issued, or in the case of Restricted Stock and similar awards, after the issued shares have vested, the holder of such shares is free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, the terms of the Trading Policy and Applicable Law.
- (I) Effect on Other Employee Benefit Plans. The value of any Award granted under the Plan, as determined upon grant, vesting or settlement, shall not be included as compensation, earnings, salaries, or other similar terms used when calculating any Participant's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.
- **(m) Deferrals.** To the extent permitted by Applicable Law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may also establish programs and procedures for deferral elections to be made by Participants. Deferrals by will be made in accordance with the requirements of Section 409A.

- (n) Section 409A. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with the requirements of Section 409A. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A is a "specified employee" for purposes of Section 409A, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date that is six months and one day following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.
- (o) C HOICE OF L AW. This Plan and any controversy arising out of or relating to this Plan shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

10. C OVENANTS OF THE C OMPANY.

(a) Compliance with Law. The Company will seek to obtain from each regulatory commission or agency, as may be deemed to be necessary, having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise or vesting of the Awards; provided, however, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary or advisable for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise or vesting of such Awards unless and until such authority is obtained. A Participant is not eligible for the grant of an Award or the subsequent issuance of Common Stock pursuant to the Award if such grant or issuance would be in violation of any Applicable Law.

11. S EVERABILITY.

If all or any part of the Plan or any Award Agreement is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of the Plan or such Award Agreement not declared to be unlawful or invalid. Any Section of the Plan or any Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

12. T ERMINATION OF THE P LAN.

The Board may suspend or terminate the Plan at any time. Unless sooner terminated by the Board, the Plan shall terminate upon the earliest to occur of (i) April 20, 2028, (ii) the date on which all shares available for issuance under the Plan shall have been issued as fully vested shares or (iii) the termination of all outstanding Awards in connection with a Change in Control. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of: (i) the Adoption Date, or (ii) the Effective Date. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

13. D EFINITIONS.

As used in the Plan, the following definitions apply to the capitalized terms indicated below:

- (a) "Acquiring Entity" means the surviving or acquiring corporation (or its parent company) in connection with a Change in Control.
- **(b)** "*Adoption Date*" means April 17, 2020.
- **(c)** "*Affiliate*" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.
- (d) "Applicable Law" means shall mean any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (including under the authority of any applicable self-regulating organization such as the Nasdaq Stock Market, New York Stock Exchange, or the Financial Industry Regulatory Authority).
- **(e)** "*Award*" means any right to receive Common Stock, cash or other property granted under the Plan (including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a RSU Award, a SAR, a Performance Award or any Other Award).
- **(f)** "*Award Agreement*" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award. The Award Agreement generally consists of the Grant Notice and the agreement containing the written summary of the general terms and conditions applicable to the Award and which is provided to a Participant along with the Grant Notice.
- **(g)** "Board" means the Board of Directors of the Company (or its designee). Any decision or determination made by the Board shall be a decision or determination that is made in the sole discretion of the Board (or its designee), and such decision or determination shall be final and binding on all Participants.
- **(h)** "*Capitalization Adjustment*" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.
- (i) "Cause" has the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (ii) such Participant's intentional, material violation of any contract or agreement between the Participant and the Company or of any statutory duty owed to the Company; (iii) such Participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; or (iv) such Participant's gross misconduct. The determination that a termination of the Participant's Continuous Service is either for Cause or without Cause will be made by the Board with respect to Participants who are executive officers of the Company and by the Company's Chief Executive Officer with respect to Participants who are not executive officers of the Company. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding

Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

- (j) "Change in Control" or "Change of Control" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events; provided, however, to the extent necessary to avoid adverse personal income tax consequences to the Participant in connection with an Award, also constitutes a Section 409A Change in Control:
 - (i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, or (C) solely because the level of Ownership held by any Exchange Act Person (the "Subject Person") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;
 - (ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;
 - (iii) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company shall otherwise occur, except for a liquidation into a parent corporation;
 - **(iv)** there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or
 - (v) individuals who, on the date the Plan is adopted by the Board, are members of the Board (the "*Incumbent Board*") cease for any reason to constitute at least a majority of the members of the Board; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing or any other provision of this Plan, the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company.

- (k) "Code" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.
- (I) "Committee" means the Compensation Committee and any other committee of Directors to whom authority has been delegated by the Board or Compensation Committee in accordance with the Plan.
 - (m) "Common Stock" means the common stock of the Company.
 - (n) "Company" means Minerva Neurosciences, Inc., a Delaware corporation.
 - (o) "Compensation Committee" means the Compensation Committee of the Board.
- **(p)** "Consultant" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.
- (q) "Continuous Service" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; provided, however, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law. In addition, to the extent required for exemption from or compliance with Section 409A, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of "sepa
 - (r) " *Director* " means a member of the Board.
 - (s) "determine" or "determined" means as determined by the Board or the Committee (or its designee) in its sole discretion.
- (t) "Disability" means, with respect to a Participant, such Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

- **(u)** " *Effective Date*" means the date of the annual meeting of stockholders of the Company held in 2020 provided this Plan is approved by the Company's stockholders at such meeting.
- **(v)** "*Employee*" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.
 - (w) " *Employer*" means the Company or the Affiliate of the Company that employs the Participant.
 - (x) "Entity" means a corporation, partnership, limited liability company or other entity.
 - (y) "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
- (z) "Exchange Act Person" means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities.
- (aa) "Fair Market Value" means, as of any date, unless otherwise determined by the Board, the value of the Common Stock (as determined on a per share or aggregate basis, as applicable) determined as follows:
 - (i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.
 - (ii) If there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.
 - (iii) In the absence of such markets for the Common Stock, or if otherwise determined by the Board, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.
- **(bb)** "Governmental Body" means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any Tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including the Nasdaq Stock Market, New York Stock Exchange, and the Financial Industry Regulatory Authority).
- (cc) "*Grant Notice*" means the notice provided to a Participant that he or she has been granted an Award under the Plan and which includes the name of the Participant, the type of Award, the date of grant of the Award, number of shares of Common Stock subject to the Award or potential cash payment right, (if any), the vesting schedule for the Award (if any) and other key terms applicable to the Award.

- **(dd)** "*Incentive Stock Option*" means an option granted pursuant to Section 4 of the Plan that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.
- (ee) "Materially Impair" means any amendment to the terms of the Award that materially adversely affects the Participant's rights under the Award. A Participant's rights under an Award will not be deemed to have been Materially Impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights. For example, the following types of amendments to the terms of an Award do not Materially Impair the Participant's rights under the Award: (i) imposition of reasonable restrictions on the minimum number of shares subject to an Option that may be exercised, (ii) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iii) to change the terms of an Incentive Stock Option in a manner that disqualifies, impairs or otherwise affects the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the Award into compliance with or qualify it for an exemption from, Section 409A; or (v) to comply with other Applicable Laws.
- **(ff)** "*Non-Employee Director*" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("*Regulation S-K*")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.
- **(gg)** "*Nonstatutory Stock Option*" means any option granted pursuant to Section 4 of the Plan that does not qualify as an Incentive Stock Option.
 - (hh) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.
- (ii) "Option" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.
- (jj) "*Option Agreement*" means a written agreement between the Company and the Optionholder evidencing the terms and conditions of the Option grant. The Option Agreement includes the Grant Notice for the Option and the agreement containing the written summary of the general terms and conditions applicable to the Option and which is provided to a Participant along with the Grant Notice. Each Option Agreement will be subject to the terms and conditions of the Plan.
- **(kk)** "*Optionholder*" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.
- (II) "Other Award" means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 5(c).
- (mm) "Other Award Agreement" means a written agreement between the Company and a holder of an Other Award evidencing the terms and conditions of an Other Award grant. Each Other Award Agreement will be subject to the terms and conditions of the Plan.
- (nn) "Own," "Owned," "Owner," "Ownership" means that a person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

- **(00)** "*Participant*" means an Employee, Director or Consultant to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.
- **(pp)** "*Performance Award*" means an Award that may vest or may be exercised or a cash award that may vest or become earned and paid contingent upon the attainment during a Performance Period of certain Performance Goals and which is granted under the terms and conditions of Section 5(b) pursuant to such terms as are approved by the Board. In addition, to the extent permitted by Applicable Law and set forth in the applicable Award Agreement, the Board may determine that cash or other property may be used in payment of Performance Awards. Performance Awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, the Common Stock.
- (qq) "*Performance Criteria*" means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any measure of performance selected by the Board.
- (rr) "Performance Goals" means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (12) to exclude the effects of the timing of acceptance for filing, review and/or approval of submissions to the U.S. Food and Drug Administration or any other regulatory body. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Award Agreement or the written terms of a Performance Cash Award.
- (ss) "*Performance Period*" means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to vesting or exercise of an Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.
 - (tt) "Plan" means this Amended and Restated Minerva Neurosciences, Inc. 2013 Equity Incentive Plan.
- **(uu)** "*Plan Administrator*" means the person, persons, and/or third-party administrator designated by the Company to administer the day to day operations of the Plan and the Company's other equity incentive programs.

- **(vv)** "*Post-Termination Exercise Period*" means the period following termination of a Participant's Continuous Service within which an Option or SAR is exercisable, as specified in Section 4(h).
- (ww) "Prior Plan's Available Reserve" means the number of shares available for the grant of new awards under the Prior Plan as of immediately prior to the Effective Date.
- (xx) "*Prior Plan*" means the Amended and Restated Minerva Neurosciences, Inc. 2013 Equity Incentive Plan prior to the Effective Date the Plan.
 - (yy) "Prospectus" means the document containing the Plan information specified in Section 10(a) of the Securities Act.
- (zz) "Restricted Stock Award" or "RSA" means an Award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).
- (aaa) "Restricted Stock Award Agreement" means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. The Restricted Stock Award Agreement includes the Grant Notice for the Restricted Stock Award and the agreement containing the written summary of the general terms and conditions applicable to the Restricted Stock Award and which is provided to a Participant along with the Grant Notice. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.
- **(bbb)** "*Returning Shares*" means shares subject to outstanding stock awards granted under the Prior Plan and that following the Effective Date: (A) are not issued because such stock award or any portion thereof expires or otherwise terminates without all of the shares covered by such stock award having been issued; (B) are not issued because such stock award or any portion thereof is settled in cash; or (C) are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares.
- (ccc) "RSU Award" or "RSU" means an Award of restricted stock units representing the right to receive an issuance of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).
- **(ddd)** "*RSU Award Agreement*" means a written agreement between the Company and a holder of a RSU Award evidencing the terms and conditions of a RSU Award grant. The RSU Award Agreement includes the Grant Notice for the RSU Award and the agreement containing the written summary of the general terms and conditions applicable to the RSU Award and which is provided to a Participant along with the Grant Notice. Each RSU Award Agreement will be subject to the terms and conditions of the Plan.
 - (eee) "Rule 16b-3" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.
 - (fff) "Rule 405" means Rule 405 promulgated under the Securities Act.
 - (ggg) "Section 409A" means Section 409A of the Code and the regulations and other guidance thereunder.
- **(hhh)** "Section 409A Change in Control" means a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company's assets, as provided in Section 409A(a)(2)(A)(v) of the Code and Treasury Regulations Section 1.409A-3(i)(5) (without regard to any alternative definition thereunder).
 - (iii) "Securities Act" means the Securities Act of 1933, as amended.

- (iji) "Share Reserve" means the number of shares available for issuance under the Plan as set forth in Section 2(a).
- **(kkk)** "Stock Appreciation Right" or "SAR" means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 4.
- (III) "SAR Agreement" means a written agreement between the Company and a holder of a SAR evidencing the terms and conditions of a SAR grant. The SAR Agreement includes the Grant Notice for the SAR and the agreement containing the written summary of the general terms and conditions applicable to the SAR and which is provided to a Participant along with the Grant Notice. Each SAR Agreement will be subject to the terms and conditions of the Plan.
- (mmm) "Subsidiary" means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.
- (nnn) "*Ten Percent Stockholder*" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.
- (**ooo**) "*Trading Policy*" means the Company's policy permitting certain individuals to sell Company shares only during certain "window" periods and/or otherwise restricts the ability of certain individuals to transfer or encumber Company shares, as in effect from time to time.

[COMPLETED PROXY CARD TO BE INSERTED]

B-1

MINERVA NEUROSCIENCES, INC. 1601 TRAPELO ROAD, SUITE 286 WALTHAM, MA 02451

VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com

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

During The Meeting - Go to www.virtualshareholdermeeting.com/NERV2020

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

D14646-P35969

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

VOTE BY MAIL

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

KEEP THIS PORTION FOR YOUR RECORDS

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

	THIS PROX	XY CA	RD IS VA	ALID ON	Y WHEN SIGNED AND DATED. DETACH	AND RETU	IRN THIS PO	ORTION ONL
The	VA NEUROSCIENCES, INC. Board of Directors recommends you vote FOR the lowing:	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.		-	_
1.	Election of Directors	0	0	0				
	Nominees:							10-71-01
	01) Dr. David Kupfer 02) Jan van Heek							
The	Board of Directors recommends you vote FOR the follo	owing	proposal	5:		Fa	or Against	Abstain
2.	To approve the Company's Amended and Restated 2013 E	quity Ir	ncentive Pl	an		C	0	0
3.	Advisory vote to approve compensation of the Company's	execut	ive compe	ensation ("s	say on pay")	0	0	0
The	Board of Directors recommends you vote 1 YEAR on the	he folk	owing pro	oposal:	n	fear 2 Ye	ars 3 Year	s Abstain
4.	To vote on an advisory resolution to approve the frequency	y of the	e Company	y's "say on	pay* vote	0 0	0	0
The	Board of Directors recommends you vote FOR the follo	owing	proposal	:		Fo	or Against	Abstain
5.	Ratification of the appointment of Deloitte & Touche LLP and December 31, 2020	as the (Company's	s independ	fent registered public accounting firm for the fiscal year endi	ng 🖸	0	0
NO	TE: Such other business as may properly come before the meetin	ng or any	y adjournn	nent thereo	f.			
adn	ase sign exactly as your name(s) appear(s) hereon. When sign ninistrator, or other fiduciary, please give full title as such. Join sonally. All holders must sign. If a corporation or partnership, partnership name by authorized officer.	nt owne	ers should	each sign				
	TO SAFE SIGNIANTI IN DOVI				Easter (kirt Overs)			

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: The Notice and Proxy Statement and Annual Report are available at www.proxyvote.com.

D14647-P35969

MINERVA NEUROSCIENCES, INC.
Annual Meeting of Stockholders
June 19, 2020 8:00 AM EDT
This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Remy Luthringer and Geoffrey Race, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of MINERVA NEUROSCIENCES, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 8:00 AM EDT on June 19, 2020 virtually via the Internet at www.virtualshareholdermeeting.com/NERV2020, and any adjournment or postponement thereof.

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.

Continued and to be signed on reverse side