UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 14A

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE SECURITIES EXCHANGE ACT OF 1934 (AMENDMENT NO.)

Filed by the Registrant $\ensuremath{\boxtimes}$ Filed by a Party other than the Registrant $\ensuremath{\square}$

Check the appropriate box:

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

ARCTURUS THERAPEUTICS HOLDINGS INC.

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- \boxtimes No fee required.
- \Box Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
- 1) Title of each class of securities to which transaction applies:
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- □ Fee paid previously with preliminary materials.
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- 1) Amount Previously Paid:

2) Form, Schedule or Registration Statement No.:

3) Filing Party:

4) Date Filed:



10628 Science Center Drive San Diego, California 92121

To our Stockholders:

We are pleased to invite you to attend the 2022 annual meeting of stockholders of Arcturus Therapeutics Holdings Inc. (the "Annual Meeting"), to be held on June 21, 2022 at 9:00 a.m. Pacific Time, at https://www.cstproxy.com/arcturusrx/2022. The 2022 Annual Meeting will be a completely virtual meeting of stockholders, which will be conducted exclusively on the internet. No physical meeting will be held.

Details regarding how to attend the virtual annual meeting and the business to be conducted at the annual meeting are more fully described in the accompanying notice of annual meeting of stockholders and proxy statement.

Your vote is important. Regardless of whether you plan to attend the virtual annual meeting, it is important that your shares be represented and voted at the annual meeting, and we hope you will vote as soon as possible. You may vote by proxy over the Internet or by mail by following the instructions on the proxy card or voting instruction card. Voting over the Internet, written proxy or voting instruction card will ensure your representation at the annual meeting regardless of whether you attend the virtual annual meeting.

Thank you for your ongoing support of, and continued interest in, Arcturus.

Sincerely,

/s/ Dr. Peter Farrell Dr. Peter Farrell Chairman of the Board

San Diego, California

May 13, 2022

/s/ Joseph E. Payne Joseph E. Payne President and Chief Executive Officer



ARCTURUS THERAPEUTICS HOLDINGS INC.

10628 Science Center Drive San Diego, California 92121

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

Time and Date	9:00 a.m. Pacific Time, on June 21, 2022.				
Place	Virtually via the Internet at https://www.cstproxy.com/arcturusrx/2022. No physical meeting will be held.				
Items of Business	(1) To elect Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz to the Board of Directors (the "Board"), to serve until our next annual meeting of stockholders.				
	(2) To approve, on a non-binding advisory basis, the resolution approving named executive officer compensation.				
	(3) To approve an amendment to the Amended and Restated 2019 Omnibus Equity Incentive Plan (as amended, the "Plan") to, among other things, increase the maximum number of shares of common stock available to Plan participants thereunder by 3,750,000 shares to an aggregate of 9,500,000 shares and increase the annual compensation non-executive directors are eligible to receive thereunder (the "Amendment").				
	(4) To approve, on a non-binding advisory basis, the preferred frequency of stockholder advisory votes on executive compensation, referred to as "say-on-frequency."				
	(5) To ratify the appointment of Ernst & Young LLP ("E&Y"), as our independent registered public accounting firm for the fiscal year ending December 31, 2022.				
	(6) To transact other business that may properly come before the annual meeting.				
Adjournments and Postponements	Any action on the items of business described above may be considered at the annual meeting at the time and on the date specified above or at any time and date to which the annual meeting may be properly adjourned or postponed.				
Record Date	April 29, 2022. Only stockholders of record of our common stock as of April 29, 2022 are entitled to notice of and to vote at the annual meeting.				
Meeting Admission	You are invited to virtually attend the annual meeting if you are a stockholder of record or a beneficial owner of shares of our common stock, in each case, as of April 29, 2022. You may attend the Annual Meeting and vote during the Annual Meeting by visiting https://www.cstproxy.com/arcturusrx/2022 and using your control number to enter the virtual Annual Meeting. If you are not a stockholder of record but hold shares as a beneficial owner in street name, you may be required to provide proof of beneficial ownership.				
Voting	Your vote is very important. You may vote by proxy over the Internet or by mail by following the instructions on the proxy card or voting instruction card.				
	For specific instructions on how to vote your shares, please refer to the section entitled "Questions and Answers About the Proxy Materials and Annual Meeting" in the accompanying proxy statement.				

By order of the Board of Directors,

/s/ Dr. Peter Farrell

Dr. Peter Farrell Chairman of the Board San Diego, California May 13, 2022

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ARCTURUS THERAPEUTICS HOLDINGS INC. PROXY STATEMENT FOR THE 2022 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JUNE 21, 2022

The information provided in the "Questions and Answers" format below is for your convenience only and is merely a summary of the information contained in this proxy statement. You should read the entire proxy statement carefully. In this proxy statement, we refer to Arcturus Therapeutics Holdings Inc., a Delaware corporation, as Arcturus, the Company, we, us, our and other similar pronouns.

QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS AND ANNUAL MEETING

Why am I receiving these materials?

This proxy statement and the enclosed form of proxy are furnished in connection with the solicitation of proxies by our Board for use at the 2022 annual meeting of stockholders of Arcturus Therapeutics Holdings Inc., a Delaware corporation, and any postponements or adjournments thereof. The annual meeting will be held on June 21, 2022 at 9:00 a.m. Pacific Time, at https://www.cstproxy.com/arcturusrx/2022.

Due to the public health impact of the coronavirus outbreak and to support the health and well-being of our employees, stockholders, and our community, the Annual Meeting will be a completely virtual meeting of stockholders, which will be conducted exclusively online at https://www.cstproxy.com/arcturusrx/2022.

Stockholders are invited to attend the virtual annual meeting and are requested to vote on the items of business described in this proxy statement. The proxy statement is being mailed on or about May 13, 2022 to all stockholders entitled to vote at the annual meeting.

Who may vote at the annual meeting?

Only stockholders of record as of the close of business on April 29, 2022, the record date, are entitled to vote at the annual meeting. As of the record date, there were 26,418,965 shares of our common stock issued and outstanding, held by 14 holders of record. We do not have cumulative voting rights for the election of directors.

How do I gain admission to the virtual annual meeting or vote my shares at the virtual annual meeting?

You are entitled to attend the virtual Annual Meeting only if you were a stockholder of record as of the record date for the Annual Meeting, which was April 29, 2022, or you hold a valid proxy for the Annual Meeting.

Registered Stockholders

If your shares are registered in your name with Arcturus' transfer agent and you wish to attend the online-only virtual meeting, go to https://www.cstproxy.com/arcturusrx/2022, enter the control number you received on your proxy card or notice of the meeting and click on the "Click here to preregister for the online meeting" link at the top of the page. Just prior to the start of the meeting you will need to log back into the meeting site using your control number. Pre-registration is recommended but is not required in order to attend.

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

Beneficial stockholders who wish to attend the online-only virtual meeting must obtain a legal proxy by contacting their account representative at the bank, broker, or other nominee that holds their shares and e-mail a copy (a legible photograph is sufficient) of their legal proxy to our transfer agent, Continental Stock Transfer ("Continental"), proxy@continentalstock.com. Beneficial stockholders who e-mail a valid legal proxy will be issued a meeting control number that will allow them to register to attend and participate in the online-only meeting. After contacting Continental, a beneficial holder will receive an e-mail prior to the meeting with a link and instructions for entering the virtual meeting. Beneficial stockholders should contact Continental at least five business days prior to the meeting date.



How do I ask questions at the virtual Annual Meeting?

Stockholders have multiple opportunities to submit questions to the Company for the virtual Annual Meeting. Stockholders who wish to submit a question in advance may do so at https://www.cstproxy.com/arcturusrx/2022. Stockholders may also submit questions online during the meeting at https://www.cstproxy.com/arcturusrx/2022. Given time constraints, some questions may not be addressed during the virtual Annual Meeting.

What am I voting on?

You are being asked to vote on five proposals:

- the election of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz to the Board, to serve until our next annual meeting of stockholders;
- the approval, by non-binding advisory vote, of the resolution approving named executive officer compensation (the "Say on Pay Proposal");
- the approval of an amendment (the "Amendment") to the Amended and Restated 2019 Omnibus Equity Incentive Plan (the "Plan"), which among other things, increases the maximum number of shares of common stock available to Plan participants by 3,750,000 shares to 9,500,000 shares, and increases the fair market value of cash or share awards a non-employee director may be granted in a calendar year under the Plan together with any awards granted outside of the Plan from \$500,000 to \$2,000,000 for newly-appointed directors, any lead independent director and any non-employee chair, or \$1,000,000 for each other non-employee director (the "Amendment Proposal"); and
- whether the say-on-pay vote should occur once every year, every two years or every three years, referred to as "say-on-frequency".
- the ratification of the appointment of Ernst & Young LLP ("E&Y") as our independent registered public accounting firm for our fiscal year ending December 31, 2022.

What if other matters are properly brought before the annual meeting?

As of the date of this proxy statement, we are not aware of any other matters that will be presented for consideration at the annual meeting. If any other matters are properly brought before the annual meeting, the persons named as proxies will be authorized to vote or otherwise act on those matters in accordance with their judgment. If for any reason any of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet or Dr. Jing L. Marantz is not available as a candidate for director, the persons named as proxy holders will vote your proxy for such other candidate as may be nominated by our Board.

How does the Board recommend that I vote?

Our Board recommends that you vote your shares:

- **"FOR**" the election of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz to the Board;
- **"FOR"** the Say on Pay Proposal;
- "FOR" the Plan Proposal;
- **"FOR**" the option of once every three years as the preferred frequency with which stockholders are provided an advisory vote on executive compensation; and
- **"FOR**" the ratification of the appointment of E&Y as our independent registered public accounting firm for our fiscal year ending December 31, 2022.



Can I vote my shares without attending the virtual annual meeting?

Stockholder of Record: Shares Registered in Your Name

Stockholders of record may vote their shares by proxy, by mail or Internet. Whether or not you plan to attend the virtual Annual Meeting, we urge you to vote by proxy to ensure your vote is counted. You may choose one of the following voting methods to cast your vote.

- 1. To vote by mail, simply mark your proxy, date and sign it, and return it to the Company in the postage-paid envelope provided.
- 2. To vote by Internet, follow the instructions on the proxy card. Internet voting prior to the virtual annual meeting is available 24 hours a day, seven days a week, until 11:59 p.m., Eastern time, on June 20, 2022.

The method by which you vote now will in no way limit your right to vote electronically at the virtual Annual Meeting if you later decide to attend. However, as discussed above, if you are a beneficial owner, you may not vote your shares virtually at the annual meeting unless you obtain a legal proxy from your broker, bank or other nominee.

Can I change my vote or revoke my proxy?

Stockholder of Record: Shares Registered in Your Name.

If you are a stockholder of record, you can change your vote or revoke your proxy at any time before the annual meeting by:

- entering a new vote over the Internet (until the applicable deadline set forth above);
- returning a later-dated proxy card (which automatically revokes the earlier proxy);
- providing a written notice of revocation to our corporate secretary at Arcturus Therapeutics Holdings Inc., 10628 Science Center Drive, San Diego, California 92121, Attn: Corporate Secretary; or
- attending the annual meeting and voting virtually.

Beneficial Owner: Shares Registered in the Name of a Broker, Bank or Other Nominee. If you are the beneficial owner of your shares, you must contact the broker, bank or other nominee holding your shares and follow their instructions to change your vote or revoke your proxy.

What is the effect of giving a proxy?

Proxies are solicited by, and on behalf of, our Board. Joseph E. Payne, our President and Chief Executive Officer, and Dr. Peter Farrell, our Chairman, have been designated as proxies for the annual meeting by our Board. When proxies are properly dated, executed and returned, the shares represented by such proxies will be voted at the annual meeting in accordance with the instruction of the stockholder. If no specific instructions are given, however, the shares will be voted in accordance with the recommendations of our Board as described above and, if any other matters are properly brought before the annual meeting, the shares will be voted in accordance with the proxies' judgment.

How many votes do I have?

On each matter to be voted upon at the annual meeting, each stockholder will be entitled to one vote for each share of our common stock held by them on the record date.

What is the quorum requirement for the annual meeting?

A quorum is the minimum number of shares required to be present or represented at the annual meeting for the meeting to be properly held under our bylaws and Delaware law. Holders of at least 33.33% of the voting power of our outstanding common stock entitled to vote at the annual meeting must be present in person or represented by proxy for us to hold and transact business at the annual meeting. On the record date, there were 26,418,965 shares outstanding and entitled to vote. Thus, the holders of at least 8,718,258 shares must be present in person or represented by proxy at the annual meeting to have a quorum.



Abstentions, "WITHHOLD" votes, and "broker non-votes" (as explained below) are counted as present and entitled to vote for purposes of determining a quorum. If there is no quorum, the meeting may be adjourned to another date by the chairman of the meeting or the holders of a majority of the voting power present in person or represented by proxy at the annual meeting and entitled to vote.

What are broker non-votes?

Broker non-votes occur when a beneficial owner of shares held in "street name" does not give instructions to the broker holding the shares as to how to vote on matters deemed "non-routine" and there is at least one "routine" matter to be voted upon at the meeting. Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker holding the shares. If the beneficial owner does not provide voting instructions, the broker can still vote the shares with respect to matters that are considered to be "routine," but not with respect to "non-routine," matters. In the event that a broker votes shares on the "routine" matters, but does not vote shares on the "non-routine" matters, those shares will be treated as broker non-votes with respect to the "non-routine" proposals. Accordingly, if you own shares through a nominee, such as a broker or bank, please be sure to instruct your nominee how to vote to ensure that your vote is counted on each of the proposals.

What matters are considered "routine" and "non-routine"?

The ratification of the appointment of E&Y as our independent registered public accounting firm for our fiscal year ending December 31, 2022 (Proposal No. 5) is considered routine under the rules of the Nasdaq Stock Market LLC ("Nasdaq"). All other proposals are considered "non-routine" under applicable federal securities rules and the rules of The Nasdaq Stock Market LLC.

What are the effects of abstentions and broker non-votes?

An abstention represents a stockholder's affirmative choice to decline to vote on a proposal. If a stockholder indicates on its proxy card that it wishes to abstain from voting its shares, or if a broker, bank or other nominee holding its customers' shares of record causes abstentions to be recorded for shares, these shares will be considered present and entitled to vote at the annual meeting. As a result, abstentions will be counted for purposes of determining the presence or absence of a quorum and will also count as votes against a proposal in cases where approval of the proposal requires the affirmative vote of a majority of the shares present in person or represented by proxy and entitled to vote at the annual meeting (Proposal No. 2, 3, 4 and 5). However, because the outcome of Proposal No. 1 (election of directors) will be determined by a plurality vote, abstentions will have no impact on the outcome of such proposal as long as a quorum exists.

Broker non-votes will be counted for purposes of calculating whether a quorum is present at the annual meeting, but will not be counted for purposes of determining the number of votes cast. Therefore, a broker non-vote will make a quorum more readily attainable but will not otherwise affect the outcome of the vote on any proposal.

What is the voting requirement to approve each of the proposals?

Proposal No. 1: Election of Directors. The election of each of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz to the Board requires a plurality of the votes cast by the holders of shares present in person or represented by proxy at the annual meeting and entitled to vote on the election of a director. This means that if each of the nominees receives one or more votes, he or she will be elected as a director. You may vote "FOR" or "WITHHOLD" for each of the nominees. Because the outcome of this proposal will be determined by a plurality vote, shares voted "WITHHOLD" will not prevent each of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz from being elected as a director. Shares voted "WITHHOLD" will count towards the quorum requirement for the annual meeting.

Proposal No. 2: Say on Pay. The approval, on an advisory basis, of the Say on Pay Proposal requires the affirmative vote of a majority of the shares present in person or represented by proxy at the annual meeting and entitled to vote thereon to be approved. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions will count towards the quorum requirement for the annual meeting and will have the same effect as a vote against the proposal.

Proposal No. 3: The Amendment to the Amended and Restated 2019 Omnibus Equity Inventive Plan. The approval of the Amendment to the 2019 Omnibus Equity Incentive Plan requires the affirmative vote of a majority of the shares present in person or represented by proxy at the annual meeting and entitled to vote thereon to be approved. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions will count towards the quorum requirement for the annual meeting and will have the same effect as a vote against the proposal.

Proposal No. 4: Say on Frequency. You have four choices for voting on this proposal. You may indicate your preference, on an advisory basis, as to whether future advisory votes on named executive officer compensation should be conducted every ONE YEAR, TWO YEARS, or THREE YEARS. You may also ABSTAIN from voting. Stockholders are not voting to approve or disapprove the recommendation of the Board, and the outcome of the vote is not binding on us. Rather, the frequency that receives the greatest number of votes cast by the voting power of the shares of our common stock present in person (including virtually) or represented by proxy at the Annual Meeting and entitled to vote thereon will be considered the preferred frequency of our stockholders. Abstentions will have no effect on the outcome of the vote.

Proposal No. 5: Ratification of Appointment of E&Y. The ratification of the appointment of E&Y requires the affirmative vote of a majority of the shares present in person or represented by proxy at the annual meeting and entitled to vote thereon to be approved. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions will count towards the quorum requirement for the annual meeting and will have the same effect as a vote against the proposal.

Who will count the votes?

A representative of Continental Stock Transfer and Trust Company will tabulate the votes and may act as inspector of elections.

What if I do not specify how my shares are to be voted or fail to provide timely directions to my broker, bank or other nominee?

Stockholder of Record: Shares Registered in Your Name. If you are a stockholder of record and you submit a proxy but you do not provide voting instructions, your shares will be voted:

- **"FOR**" the election of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz to the Board;
- **"FOR"** the Say on Pay Proposal;
- · "FOR" the Plan Proposal, and
- **"FOR**" the option of once every three years as the preferred frequency with which stockholders are provided an advisory vote on executive compensation; and
- **"FOR**" the ratification of the appointment of E&Y as our independent registered public accounting firm for our fiscal year ending December 31, 2022.

In addition, if any other matters are properly brought before the annual meeting, the persons named as proxies will be authorized to vote or otherwise act on those matters in accordance with their judgment.

Beneficial Owner: Shares Registered in the Name of a Broker, Bank or Other Nominee. Brokers, banks and other nominees holding shares of common stock in street name for customers are generally required to vote such shares in the manner directed by their customers. In the absence of timely directions, your broker, bank or other nominee will have discretion to vote your shares on our sole "routine" matter - Proposal No. 5 relating to ratifying the appointment of E&Y. Absent direction from you, however, your broker, bank or other nominee will <u>not</u> have the discretion to vote on Proposal No. 1, 2, 3 or 4.

How can I contact Arcturus' transfer agent?

You may contact our transfer agent by writing Continental Stock Transfer & Trust Company, 1 State Street, 30th Floor, New York, NY 10014. You may also contact our transfer agent via email at cstmail@continentalstock.com or by telephone at (212) 509-4000.

How are proxies solicited for the annual meeting, and who is paying for such solicitation?

Our Board is soliciting proxies for use at the annual meeting by means of the proxy materials. We will bear the entire cost of proxy solicitation, including the preparation, assembly, printing, mailing and distribution of the proxy materials. Copies of solicitation materials will also be made available upon request to brokers, banks and other nominees to forward to the beneficial owners of the shares held of record by such brokers, banks or other nominees. The original solicitation of proxies may be supplemented by solicitation by telephone, electronic communication, or other means by our directors, officers or employees. No additional compensation will be paid to these individuals for any such services, although we may reimburse such individuals for their reasonable out-of-pocket expenses in connection with such solicitation. We do not plan to retain a proxy solicitor to assist in the solicitation of proxies, although we may engage a proxy solicitor in the future.

If you choose to access the proxy materials and/or vote over the Internet, or attend the virtual meeting, you are responsible for any Internet access charges you may incur.

Where can I find the voting results of the annual meeting?

We will announce preliminary voting results at the annual meeting. We will also disclose voting results on a Current Report on Form 8-K filed with the Securities and Exchange Commission ("SEC"), within four business days after the annual meeting. If final voting results are not available to us in time to file a Current Report on Form 8-K within four business days after the annual meeting, we will file a Current Report on Form 8-K to publish preliminary results and, within four business days after final results are known, file an additional Current Report on Form 8-K to publish the final results.

What does it mean if I receive more than one set of printed materials?

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

I share an address with another stockholder, and we received only one printed copy of the proxy materials. How may I obtain an additional copy of the proxy materials?

We have adopted an SEC-approved procedure called "householding," under which we can deliver a single copy of the proxy materials and annual report to multiple stockholders who share the same address unless we receive contrary instructions from one or more of the stockholders. This procedure reduces our printing and mailing costs. Stockholders who participate in householding will continue to be able to access and receive separate proxy cards. Upon written or oral request, we will undertake to promptly deliver a separate copy of the proxy materials and annual report to any stockholder at a shared address to which we delivered a single copy of any of these documents. To receive a separate copy, or, if you are receiving multiple copies, to request that we only send a single copy of next year's proxy materials and annual report, you may contact us at the address below, or call us at 858-900-2660:

Arcturus Therapeutics Holdings Inc. Attention: Investor Relations 10628 Science Center Drive San Diego, California 92121

Stockholders who hold shares in street name may contact their brokerage firm, bank, broker-dealer or other nominee to request information about householding.



When are stockholder proposals due for next year's annual meeting?

Please see the section entitled "*Proposals of Stockholders for 2023 Annual Meeting*" in this proxy statement for more information regarding the deadlines for the submission of stockholder proposals for our 2023 annual meeting.

BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Composition of the Board

Our Board is currently composed of seven members. The following table sets forth the names, ages, and certain other information for our directors.

Name	Age	Position(s)	Director Since
Dr. Peter Farrell	79	Chairman of the Board	May 2018
Joseph E. Payne	50	President, Chief Executive Officer and Director	March 2013
Andy Sassine	57	Chief Financial Officer and Director	September 2019
James Barlow	63	Director	May 2018
Dr. Edward W. Holmes	81	Director	September 2019
Dr. Magda Marquet	63	Director	May 2018
Dr. Jing L. Marantz	56	Director	December 2021

Dr. Peter Farrell is the Chairman of our Board, a position he has held since May 2018. In addition, Dr. Farrell is the founder, former long-term CEO and current Chairman of ResMed Inc. (NYSE:RMD). Dr. Farrell has been Chairman and a director of ResMed since 1989, when the company began as a management buyout of sleep technology from Baxter Healthcare. Peter was previously Foundation Director of the University of New South Wales (UNSW) Graduate School for Biomedical Engineering (1978-89) while simultaneously serving as Vice President of Research & Development for Baxter Healthcare in Tokyo (1984-89). Dr. Farrell served on the board of directors of NuVasive. Inc., a company focused on the surgical treatment of spine disorders. Dr. Farrell serves on the board of trustees of The Scripps Research Institute in La Jolla and is Chairman of the Boston-based POC NMR diagnostic company, WaveGuide. Since July 2019, Dr. Farrell has been a director of Evolus, Inc. (EOLS). Dr. Farrell is a fellow or honorary fellow of several professional bodies, including the US National Academy of Engineering. He was inducted as 1998 San Diego Entrepreneur of the Year for Health Sciences, 2001 Australian Entrepreneur of the Year and 2005 US National Entrepreneur of the Year for Health Sciences. Dr. Farrell was appointed to the Executive Council of the division of Sleep Medicine at Harvard Medical School in 1998, was appointed Vice Chairman in 2000 (2000-2010), became Chairman in 2010 and served in that capacity for three years. He is on various academic advisory boards including UCSD's Jacobs School of Engineering, where he was named the 2012 Gordon Fellow, UCSD's Rady Business School and the MIT Dean of Engineering's Advisory Council. Dr. Farrell holds a B.E. with honors in chemical engineering from the University of Sydney, an SM in chemical engineering from MIT, a PhD in bioengineering from the University of Washington, Seattle, and a DSc from UNSW for research which resulted in improved treatment for both hemodialysis and peritoneal dialysis patients. Dr. Farrell is nominated for re-election on our Board because of his significant experience as an executive and director of a number of companies in the healthcare sector.

Joseph E. Payne is our President and Chief Executive Officer, positions he has held since March 2013. Mr. Payne served on our predecessor's board since March 2013. He brings with him an exceptional track record of ushering novel therapeutics to the clinic including targeted RNA medicines utilizing lipid-mediated delivery technologies. Mr. Payne's background includes over 20 years of successful drug discovery experience at Merck Research Labs, DuPont Pharmaceuticals, Bristol-Myers Squibb, Kalypsys, and Nitto Denko Corporation as evidenced by over 40 publications and patents, and several investigational new drug (IND) clinical candidates. His academic training includes a Bachelor's Degree in Chemistry, magna cum laude from Brigham Young University, a Master of Science in Synthetic Organic Chemistry from the University of Calgary and Executive Training Certification from MIT Sloan School of Management. He currently serves on the board of directors of Vallon Pharmaceuticals Inc., a public clinical-stage company focused on the development and commercialization of novel abuse-deterrent medications for CNS disorders. Mr. Payne is nominated for re-election on our Board because of his position as our President and Chief Executive Officer and his significant experience in the pharmaceutical sector. As a member of our executive team, Mr. Payne serves a vital function in the link between management and our Board, enabling the Board to perform its oversight function with the benefits of management's perspective on the business.



Andy Sassine has served as our Chief Financial Officer since January 2019. Mr. Sassine served as one of our directors from May 2018 until June 2019, and was reelected as a director in September 2019. Mr. Sassine serves on the board of directors of iCAD Inc. (NASDAQ:ICAD), a leading provider of advanced image analysis, workflow solutions and radiation therapy for early detection and treatment of cancer. Mr. Sassine served in various positions at Fidelity Investments from 1999 to 2012, including, most recently as Portfolio Manager. Between 2004 and 2011, he managed the Fidelity Small Cap Stock Fund, the Fidelity International Small Cap Opportunities Fund and the Fidelity Advisor International Small Cap Opportunities Fund. Mr. Sassine joined Fidelity as a high yield research analyst, covering the Telecommunications, Satellite, Technology, Defense and Aerospace, and Restaurant Industries and in 2001, joined the international group as a research analyst covering small and mid-cap international stocks. Mr. Sassine has been a member of the Henry B. Tippie College of Business, University of Iowa Board of Advisors since 2009 and served on the Board of Trustees at the Clarke Schools for Hearing and Speech between 2009 and 2014. Mr. Sassine earned a Bachelor of Arts degree at the University of Iowa in 1987 and an MBA from the Wharton School at the University of Pennsylvania in 1993. Mr. Sassine is nominated for re-election on our Board because of his position as our Chief Financial Officer and his extensive knowledge and experience as a fund manager and board member of other similarly-sized companies.

James Barlow is a member of the board of directors of NAHS Holding, Inc., an Employee Stock Ownership Plan company, whose affiliates provide postacute care, subacute care, short and long-term rehabilitation, and skilled nursing in the United States. Mr. Barlow is a C-level financial executive with more than 30 years of experience leading teams in the successful strategic achievement of financial and operational goals, and expertise in domestic and international operations, financial planning, forecasting and reporting, restructurings, business development and integrations, treasury and investor relations. As an Executive Officer (Principal Accounting Officer) at Allergan, Inc. from January 2002 to March 2015, he oversaw financial due diligence, integration and structuring for all significant asset purchases, sales, business combinations and licensing transactions, the spin-off of Advanced Medical Optics, the \$3.3 billion acquisition of Inamed Corporation and more than \$4.5 billion in other transactions. He ensured consistent application of corporate policies and procedures and alignment with global reporting and corporate compliance requirements, made recommendations globally to improve financial operations and participated in robust financial planning/forecasting activities. Prior to joining Allergan, Mr. Barlow served as Chief Financial Officer of Wynn Oil Company, a division of Parker Hannifin Corporation, during 2001, Treasurer and Controller of Wynn's International, Inc. from 1990 to 2000 and Vice President and Controller of Ford Equipment Leasing Company from 1986 to 1990. From 1983 to 1985 Mr. Barlow worked for the accounting firm Deloitte Haskins and Sells. Mr. Barlow received a Bachelor of Science degree in Accounting, graduating magna cum laude, from Brigham Young University and a Master of Accountancy, graduating with honors—high distinction, from Brigham Young University. He is a certified public accountant (inactive). Mr. Barlow is nominated for re-election on our Board of Directors because of hi

Dr. Edward W. Holmes has served as a member of our Board of Directors since September 2019. Dr. Holmes is currently a Distinguished Professor of Medicine at the University of California, Vice Chancellor/Dean of Health Sciences Emeritus at the University of California, San Diego, and CEO/President of the Sanford Consortium for Regenerative Medicine. Dr. Holmes has served as Chair of the Department of Medicine at the University of Pennsylvania, Vice President for Translational Medicine at Stanford University, and Vice Chancellor/Dean of Duke University School of Medicine. Dr. Holmes was the Executive Deputy Chairman of the Biomedical Research Council and the Executive Chairman of the National Medical Research Council in Singapore; he was a Senior Fellow in A*STAR and Advisor to the National Research Council of Singapore. He holds an appointment as the Lien Ying Chow Professor of Medicine at the Yong Loo Lin School of Medicine, National University of Singapore. For his contributions to the Singapore government, Dr. Holmes was made an Honorary Citizen in 2011, and he was awarded the President's Science and Technology Medal in 2017. Dr. Holmes also served on the Council of Advisors for the National Institute for Diabetes, Digestive, and Kidney Diseases of the National Institutes of Health. He served as Chair of the Research Advisory Board of GlaxoSmithKline, on the scientific advisory board of Ajinomoto and on the board of directors of Tularik, Inc. He also served on the Grand Challenges Explorations Innovation Review Panel for the Gates Foundation. He has been elected to membership in the American Society for Clinical Investigation, the Association of American Physicians, Fellow of the American Association for the Advancement of Science, and a member of the United States National Academy of Medicine. Dr. Holmes holds a Doctor of Medicine degree from the University of Pennsylvania. Dr. Holmes is nominated for re-election on our Board because of his significant experience in research, medicine and genetics.

Dr. Magda Marquet, Ph.D., joined our Board of Directors in 2018. Dr. Marquet has served as co-founder and co-chief executive officer of ALMA Life Sciences LLC, an early-stage healthcare investment firm, since 2013. Dr. Marquet also has been a co-founder of AltheaDx, a biotechnology company, since 2009. Dr. Marquet previously served as the co-founder and chairman of Althea Technologies, a biotechnology company, from 2009 to 2019, and previously served as its co-president and co-chief executive officer from 1998 to 2009. Prior to starting Althea Technologies, Dr. Marquet held several positions in product development and pharmaceutical development in companies such as Vical and Amylin Pharmaceuticals. Dr. Marquet served on the board of directors of Pfenex from 2019 until its acquisition by Ligand Pharmaceuticals in October 2020 and now serves on the board of directors of AnaptysBio since January 2021 as well as several private company boards. Dr. Marquet holds a Ph.D. in biochemical engineering from INSA/University of Toulouse, France. Dr. Marquet is nominated for re-election on our Board because of her significant experience as an executive and director of a number of companies in the life sciences sector, and because of her management and clinical expertise.

Dr. Jing L. Marantz, M.D., Ph.D., MBA, joined our Board of Directors in December 2021. Dr. Marantz has served as Chief Business Officer of Krystal Biotech, Inc., a clinical stage gene therapy company, since January 2022 after serving on its board since January 2021. Dr. Marantz previously served as Senior Vice President, Head of Medical Affairs of Acceleron Pharma, Inc. from October 2020 until its acquisition by Merck & Co, Inc. in November 2021. From June 2018 to September 2020, Dr. Marantz served as Senior Vice President, Medical Affairs of Alnylam Pharmaceuticals, Inc., a biopharmaceutical company focused on the discovery, development and commercialization of RNA interference therapeutics. She served as Vice President, Global Medical Affairs for Alexion Pharmaceuticals from August 2016 to June 2018 and as Global Medical Lead for TECFIDERA[®] at Biogen from April 2014 to June 2016. Dr. Marantz earned her medical degree from Tongji Medical College, Ph.D. in Biochemistry and Molecular Biology from Medical University of South Carolina and MBA from the University of California at Berkeley.

Director Independence

The listing rules of Nasdaq require us to maintain a Board comprised of a majority of independent directors, as determined affirmatively by our Board. In addition, the Nasdaq listing rules require that, subject to specified exceptions, each member of our audit, compensation and nominating and corporate governance committees must be independent. Audit committee members and compensation committee members must also satisfy the independence criteria set forth in Rule 10A-3 and Rule 10C-1, respectively, under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Under the Nasdaq listing rules, a director will only qualify as an "independent director" if, in the opinion of our Board, the director does not have a relationship that would interfere with the exercise of independent judgment in carrying out his or her responsibilities.

Our Board has undertaken a review of the independence of our directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our Board has determined that none of Dr. Farrell, Mr. Barlow, Dr. Holmes Dr. Marquet and Dr. Marantz (representing five of our seven directors), has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that they each are an "independent director" as that term is defined under the Nasdaq listing rules. Mr. Payne is not considered independent due to his position as our President and Chief Executive Officer. Mr. Sassine is not considered independent due to his position as our Chief Financial Officer.

In making these determinations, our Board considered the relationships that each nonemployee director has with us and all other facts and circumstances our Board deemed relevant in determining their independence, including consulting relationships, family relationships and the beneficial ownership of our capital stock by each non-employee director.

Board Leadership Structure

Our Board is currently chaired by Dr. Farrell. Our Board believes that we and our stockholders are currently best served by this leadership structure. As Chairman, Dr. Farrell promotes unified leadership and direction for our Board and management and provides the critical leadership necessary for carrying out our strategic initiatives. Dr. Farrell, together with our Board's strong committee system and independent directors, allows our Board to maintain effective oversight of our business operations, including independent oversight of our financial statements, executive compensation, selection of director candidates, and corporate governance programs. We believe our current Board's leadership structure enhances its ability to effectively carry out its roles and responsibilities on behalf of our stockholders.



Role of Board in Risk Oversight Process

Our Board has an active role, as a whole and also at the committee level, in overseeing risk management. Our Board is responsible for general oversight and regular review of risk management, including financial, strategic, and operational risks. The compensation committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements, and whether our compensation policies and programs have the potential to encourage excessive risk taking. The audit committee is responsible for overseeing the management of risks relating to accounting matters and financial reporting. The nominating and corporate governance committee is responsible for overseeing our corporate governance practices and the management of risks associated with Board independence and potential conflicts of interest. Although each committee is responsible for evaluating and overseeing the management of certain risks, the entire Board is regularly informed through discussions from committee members about such risks. The Board believes its leadership structure is consistent with and supports the administration of its risk oversight function.

Board Meetings and Committees

During 2021, our Board held five meetings, and each director attended at least 75% of the aggregate of (i) the total number of meetings of our Board held during the period for which he or she has been a director and (ii) the total number of meetings held by all committees of our Board on which he or she served during the periods that he or she served.

Our Board has established an audit committee, a compensation committee and a nominating and corporate governance committee. The composition and responsibilities of each of the committees of our Board is described below.

Audit Committee

Our audit committee members currently consist of Mr. Barlow, Dr. Holmes and Dr. Marquet. Mr. Barlow serves as the chairman. Each of the members of our audit committee is an independent director under the Nasdaq listing rules, satisfies the additional independence criteria for audit committee members and satisfies the requirements for financial literacy under the Nasdaq listing rules and Rule 10A-3 of the Exchange Act, as applicable.

Our Board has also determined that Mr. Barlow qualifies as an audit committee financial expert within the meaning of the applicable rules and regulations of the SEC and satisfies the financial sophistication requirements of the Nasdaq listing rules.

Our audit committee oversees our corporate accounting and financial reporting process and assists our Board in monitoring our financial systems and our legal and regulatory compliance. Our audit committee also:

- · oversees the work of our independent auditors;
- approves the hiring, discharging and compensation of our independent auditors;
- approves engagements of the independent auditors to render any audit or permissible non-audit services;
- · reviews the qualifications, independence and performance of the independent auditors;
- · reviews our financial statements and our critical accounting policies and estimates;
- · reviews the adequacy and effectiveness of our internal controls;

- · reviews our policies with respect to risk assessment and risk management;
- · reviews and monitors our policies and procedures relating to related person transactions; and
- reviews and discusses with management and the independent auditors the results of our annual audit, our quarterly financial statements and our publicly filed reports.

Our audit committee operates under a written charter approved by our Board and that satisfies the applicable rules and regulations of the SEC and the listing requirements of Nasdaq. The charter is available on the corporate governance section of our website, which is located at http://ir.arcturusrx.com/governance-highlights. Our audit committee held six meetings during 2021.

Compensation Committee

The members of our compensation committee are Dr. Marquet, Dr. Marantz and Mr. Barlow. Dr. Marquet is currently the chairwoman of our compensation committee. Our Board has determined that each member of our compensation committee is an independent director under the current rules of Nasdaq, satisfies the additional independence criteria for compensation committee members under Rule 10C-1 of the Exchange Act and the Nasdaq listing rules, is a "non-employee director" within the meaning of Rule 16b-3 under the Exchange Act, and is an "outside director" for purposes of Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code").

Our compensation committee oversees our corporate compensation programs. The compensation committee also:

- reviews and recommends for Board approval policies, plans and arrangements relating to compensation and benefits of our officers and employees;
- reviews and recommends for Board approval corporate goals and objectives relevant to the compensation of our Chief Executive Officer and other executive officers;
- evaluates the performance of our executive officers in light of established goals and objectives;
- · recommends compensation of our executive officers based on its evaluations;
- reviews director compensation levels and practices, and recommends, from time to time, changes in such compensation levels and practices to the Board;
- · reviews and discusses with management the compensation disclosures required by SEC rules;
- engages a compensation consultant, legal counsel or other external advisors to advise on executive compensation and assess the independence of executive officers in accordance with Nasdaq;
- evaluates whether any compensation consultant, legal counsel or other external advisor has a conflict of interest in accordance with the SEC rules; and
- · prepares the annual compensation committee report required by SEC rules.

Our compensation committee is also responsible for assessing and monitoring whether any of our compensation policies and programs have the potential to encourage excessive risk-taking.

Our compensation committee operates under a written charter approved by our Board and that satisfies the applicable rules and regulations of the SEC and the listing requirements of Nasdaq. The charter is available on the corporate governance section of our website, which is located at http://ir.arcturusrx.com/governance-highlights. Our compensation committee held six meetings during 2021.



Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee was at any time one of our officers or employees. None of our executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as members of our Board or compensation committee.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Dr. Holmes, Dr. Marantz and Dr. Farrell. Dr. Holmes is the chairman of our nominating and corporate governance committee. Our Board has determined that each member of our nominating and corporate governance committee is independent under the Nasdaq listing rules.

Our nominating and corporate governance committee oversees and assists our Board in reviewing and recommending nominees for election as directors. The nominating and corporate governance committee also:

- evaluates and makes recommendations regarding the organization and governance of our Board and its committees;
- · assesses the performance of members of our Board and makes recommendations regarding committee and chair assignments;
- · recommends desired qualifications for Board membership and conducts searches for potential members of our Board; and
- · reviews and makes recommendations with regard to our corporate governance guidelines.

Our nominating and corporate governance committee operates under a written charter approved by our Board and that satisfies the applicable rules and regulations of the SEC and the listing requirements of Nasdaq. The charter is available on the corporate governance section of our website, which is located at http://ir.arcturusrx.com/governance-highlights. Our nominating and corporate governance committee held three meetings during 2021.

Board Diversity

Effective corporate governance is critical for both our long-term performance and maintaining stockholder trust. Our Board is responsible for overseeing the governance, strategy and operation of the Company. Our seven directors come from diverse backgrounds, drawing on their substantial experience across industries and professional designations, including experience related to: biotechnology and pharmaceutical; finance, including investment management and capital markets; healthcare and medical services and operations; philanthropy; public accounting; and higher education. Pursuant to California SB 826, as a public corporation with seven directors at the end of the 2021 calendar year, we are required to have a minimum of three female directors. As of the date hereof, two members of our Board are women; in August 2021, Ms. Karah Parschauer stepped down as a member of the Board, as described elsewhere in this proxy statement. We are reviewing potential director candidates to ensure compliance with California SB 826. We comply with California AB 979, which requires corporations with five to eight directors to have a minimum of two directors from underrepresented communities.

Board Diversity Matrix

Board Diversity Matrix (As of May 2)

Total Number of Directors		Seven			
	Female	Male	Non-Binary	Did Not Disclose Gender	
Part I: Gender Identity					
Directors	2	5	-	-	
Part II: Demographic Background					
Asian	1	-	-	-	
Hispanic or Latinx	1	-	-	-	
White	-	5	-	-	
Did Not Disclose Demographic Background			-		

Considerations in Evaluating Director Nominees

In its evaluation of director candidates, including the member or members of the Board eligible for reelection, our nominating and corporate governance committee will consider the following:

- The current size and composition of our Board and the needs of the Board and its respective committees;
- Factors such as character, integrity, judgment, diversity of experience, independence, area of expertise, corporate experience, length of service, potential conflicts of interest, other commitments, and the like. Our nominating and corporate governance committee evaluates these factors, among others, and does not assign any particular weighting or priority to any of these factors; and
- · Other factors that our nominating and corporate governance committee may consider appropriate.

The nominating and corporate governance committee also focuses on issues of diversity, such as diversity in experience, international perspective, background, expertise, skills, age, gender, and ethnicity. The nominating and corporate governance committee does not have a formal policy with respect to diversity; however, our Board and the nominating and corporate governance committee believe that it is essential that members of our Board represent diverse viewpoints. Any nominee for a position on the Board must satisfy the following minimum qualifications:

- The highest levels of personal and professional ethics and integrity;
- · Proven achievement and competence in the nominee's field and the ability to exercise sound business judgment;
- · Skills that are complementary to those of the existing Board;
- · The ability to assist and support management and make significant contributions to our success; and
- An understanding of the fiduciary responsibilities required of a member of the Board and the commitment of time and energy necessary to diligently carry out those responsibilities.

If our nominating and corporate governance committee determines that an additional or replacement director is required, the committee may take such measures as it considers appropriate in connection with its evaluation of a director candidate, including candidate interviews, inquiry of the person or persons making the recommendation or nomination, engagement of an outside search firm to gather additional information, or reliance on the knowledge of the members of the committee, Board or management.

After completing its review and evaluation of director candidates, our nominating and corporate governance committee recommends to our full Board the director nominee. Our nominating and corporate governance committee has discretion to decide which individuals to recommend for nomination as directors and our Board has the final authority in determining the selection of director candidates for nomination to our Board.

Requirements for Stockholder Recommendations of a Candidate to our Board

Our nominating and corporate governance committee will consider recommendations for candidates to our Board from our stockholders. A stockholder that wishes to recommend a candidate for consideration by the committee as a potential candidate for director must direct the recommendation in writing to Arcturus Therapeutics Holdings Inc., 10628 Science Center Drive, San Diego, California 92121, Attention: Corporate Secretary, and must include the candidate's name, home and business contact information, detailed biographical data, relevant qualifications, a signed letter from the candidate confirming willingness to serve, information regarding any relationships between us and the candidate and evidence of the recommending stockholder's ownership of our stock. Such recommendation must also include a statement from the recommending stockholder in support of the candidate, particularly within the context of the criteria for Board membership, including character, integrity, judgment, diversity of experience, independence, area of expertise, corporate experience, potential conflicts of interest, other commitments and personal references. Our nominating and corporate governance committee will consider the recommendation but will not be obligated to take any further action with respect to the recommendation. See *"Stockholder Proposals and Director Nominations Not for Inclusion in Proxy Statement"* elsewhere in this proxy statement for additional requirements on the timeliness for recommendations for candidates in connection with next year's annual meeting.

Communications with the Board

In cases where stockholders or other interested parties wish to communicate directly with our non-management directors, messages can be sent to Arcturus Therapeutics Holdings Inc., 10628 Science Center Drive, San Diego, California 92121, Attention: Corporate Secretary. Our corporate secretary monitors these communications and will provide a summary of all received messages to the Board at each regularly scheduled meeting of the Board. Our Board generally meets on a quarterly basis. Where the nature of a communication warrants, our corporate secretary may determine, in his judgment, to obtain the more immediate attention of the appropriate committee of the Board, non-management directors, independent advisors or our management, as our corporate secretary considers appropriate.

Our corporate secretary may decide in the exercise of his or her judgment whether a response to any stockholder or interested party communication is necessary.

This procedure for stockholder and other interested party communications with the non-management directors is administered by our nominating and corporate governance committee. This procedure does not apply to (i) communications to non-management directors from our officers or directors who are stockholders or (ii) stockholder proposals submitted pursuant to Rule 14a-8 under the Exchange Act.

Director Attendance at Annual Meetings

We do not have a formal policy regarding attendance by members of our Board at annual meetings of stockholders. We encourage, but do not require, directors to attend. All members of our Board attended the 2021 annual meeting of stockholders.

Code of Business Conduct and Ethics

On December 7, 2021, the Board approved and adopted a new Code of Business Conduct and Ethics (the "New Code of Conduct"). The New Code of Conduct is applicable to all directors, officers and employees of the Company and its subsidiaries, including but not limited to the Company's principal executive officer and principal financial officer. The New Code of Conduct replaces the Company's previous Code of Business Conduct and Ethics (the "Prior Code") in its entirety, to reflect current industry and public company best practices

A copy of the New Code of Conduct on the corporate governance section of our website, which is located at http://ir.arcturusrx.com/governance-highlights.

Human Capital Management

At Arcturus, dedication to human capital management is a core component of our corporate governance and culture. Our comprehensive approach to human capital management is grounded in our core values of integrity, excellence, and respect for people, which reflect our commitment to creating a safe, supportive, ethical, and rewarding work environment.

As of December 31, 2021, we had 177 full-time employees and no part-time employees.

Environmental, Social and Governance Practices

We do not currently have a formal Environmental, Social and Governance Policy ("ESG Policy") in place, but plan to do so in the future. We anticipate that the ESG Policy, when adopted by the Board, will include "Human Capital Management" as a key component, and focus on various topics, which may or may not include (1) hiring, promotion and talent development; (2) health and safety; (3) compensation and benefits; and (4) diversity and inclusion. Although we have not adopted a formal ESG Policy, our management and leadership incorporates the foregoing and other environmental, social and governance considerations in all matters related to human capital and human capital management.

Employee, Officer and Director Hedging

Pursuant to our Insider Trading Policy, officers, and employees are prohibited from engaging in any hedging transactions (including transactions involving options, puts, calls, prepaid variable forward contracts, equity swaps, collars and exchange funds, or other derivatives) that are designed to hedge or speculate on any change in the market value of our securities.



DIRECTOR COMPENSATION

Director Compensation Table

The following table and related footnotes show the compensation paid during the year ended December 31, 2021 to our non-employee directors.

	ees Earned or Paid in		Option	All Other	
Name	Cash (\$)	A	Awards (\$) (1)	Compensation (\$)	Total (\$)
Dr. Peter Farrell	\$ 65,000	\$	324,782		\$ 389,782
Mr. James Barlow	\$ 62,500	\$	324,782		\$ 387,282
Dr. Magda Marquet	\$ 52,500	\$	324,782		\$ 377,282
Dr. Edward W. Holmes	\$ 52,500	\$	324,782	—	\$ 377,282
Dr. Jing L. Marantz (2)	\$ 2,378	\$	642,585	_	\$ 644,963
Ms. Karah Parschauer (3)	\$ 31,576	\$	324,782	—	\$ 356,358

- (1) Represents annual option awards, which vest as set forth below in "Annual Equity Grants."
- (2) Dr. Marantz was appointed to serve as a member of the Board, effective December 7, 2021.
- (3) Karah Parschauer resigned from the Board and any associated committees of the Board, effective August 25, 2021. Ms. Parschauer, is employed by Ultragenyx Pharmaceutical Inc. ("Ultragenyx") and served on the Board pursuant to the Equity Purchase Agreement, dated June 18, 2019 (the "Equity Agreement"), between the Company and Ultragenyx. As set forth in a Form 13D/A filed by Ultragenyx with the SEC on October 26, 2021, Ultragenyx, no longer owns the number of shares of the Company's common stock that automatically provides Ultragenyx the right under the Equity Agreement to have a nominee included in the annual slate of director nominees. Due to such decrease in ownership and consistent with such contractual terms, Ms. Parschauer tendered her resignation.

Narrative to Director Compensation Table

Our director compensation policy is intended to provide a total compensation package that enables us to attract and retain qualified and experienced individuals to serve as directors and to align our directors' interests with those of our stockholders.

Annual Cash Compensation

The annual retainers payable to non-employee directors for service on the Board and its committees are (i) \$35,000 for service on the Board, (ii) \$5,000 for service on each of the compensation committee and the nominating and corporate governance committee, (ii) \$7,500 for service on the audit committee, (iii) an additional \$20,000 for the Chairman of the Board, (iv) an additional \$5,000 for the chairman of each of the compensation committee and the nominating and corporate governance committee.

Inaugural Equity Grants

Each non-employee director who joins the board receives an equity award of an option to purchase 20,000 shares of our common stock, which vests monthly over a two-year period from the date of grant.

Annual Equity Grants

Each non-employee director receives an annual equity award of an option to purchase 15,000 shares of our common stock, which vests monthly over a one-year period from the date of grant. New directors receive an annual equity grant that is prorated based on the number of days of their service in the year of grant.



ELECTION OF DIRECTORS

Our Board is currently composed of seven directors. At the annual meeting, each director will be elected to our Board by the holders of our common stock. Each director's term continues until the election and qualification of his or her successor, or such director's earlier death, resignation or removal.

Nominees for Director

Our nominating and corporate governance committee recommended for nomination and our Board nominated each of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz, for election as a director at the annual meeting. If elected, each will serve as a director until our next annual meeting and until his or her respective successor is duly elected and qualified. For more information concerning each of the nominees, please see the section entitled "*Board of Directors and Corporate Governance*."

Each of the nominees has agreed to serve if elected, and management has no reason to believe that he or she will be unavailable to serve. In the event he or she is unable or declines to serve as a director at the time of the annual meeting, proxies will be voted for any nominee who may be proposed by the nominating and corporate governance committee and designated by the present Board to fill the vacancy.

Required Vote

The directors elected to the Board will be elected by a plurality of the votes cast by the holders of shares present in person or represented by proxy and entitled to vote on the election of a director. In other words, if each of the nominees receives a single "FOR" vote, he or she will be elected as a director. Shares represented by executed proxies will be voted, if authority to do so is not expressly withheld, to elect of each of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz, as a director. Broker non-votes will have no effect on this proposal.

Board Recommendation:

Our Board recommends a vote "FOR" the election to the Board of each of Dr. Peter Farrell, Joseph E. Payne, Andy Sassine, James Barlow, Dr. Edward W. Holmes, Dr. Magda Marquet and Dr. Jing L. Marantz, as a director.

TO APPROVE, BY NON-BINDING ADVISORY VOTE, THE RESOLUTION APPROVING THE COMPANY'S NAMED EXECUTIVE OFFICER COMPENSATION

In accordance with Section 14A of the Exchange Act and the related rules of the SEC, the Company is asking its stockholders to vote to approve, on an advisory (non-binding) basis, the compensation of our named executive officers as disclosed in this proxy statement. This proposal, commonly known as a "say-on-pay" proposal, gives our stockholders the opportunity to express their views on the compensation of our named executive officers. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the principles, policies and practices described in this proxy statement. Accordingly, the following advisory resolution is submitted for stockholder vote at the annual meeting:

RESOLVED, that the stockholders of Arcturus Therapeutics Holdings, Inc. (the "Company") approve, on an advisory basis, the compensation of the Company's named executive officers as disclosed in this proxy statement pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the compensation tables regarding named executive officer compensation and the narrative disclosures that accompany the compensation tables.

Although the "say-on-pay" vote is non-binding, the board of directors and the compensation committee will carefully review and consider the voting results when evaluating our named executive officer compensation program.

Required Vote

The Say on Pay Proposal requires the affirmative vote of a majority of the shares present in person or represented by proxy at the annual meeting and entitled to vote thereon to be approved. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions will count towards the quorum requirement for the annual meeting and will have the same effect as a vote against the proposal. Broker non-votes will have no effect on this proposal.

Board Recommendation

Our board of directors recommends a vote "FOR" the approval of the non-binding advisory resolution approving the Company's Named Executive Officer compensation.



TO APPROVE THE AMENDMENT TO THE AMENDED AND RESTATED 2019 OMNIBUS EQUITY INCENTIVE PLAN

We are asking our stockholders to approve the Amendment to the existing Arcturus Therapeutics Holdings Inc. Amended and Restated 2019 Omnibus Equity Incentive Plan. Upon recommendation of the compensation committee, the Board approved the Amendment, subject to receipt of stockholder approval, and has recommended that stockholders approve this Proposal No. 3 to approve the Amendment. Equity-based compensation is an important component of our compensation philosophy because it provides employees with long-term exposure to the Company's performance and aligns employees' interests with those of our stockholders. Approval of the Amendment will allow us to continue to grant equity compensation awards to our employees, officers, and directors in furtherance of this philosophy.

We are asking our stockholders to approve the Amendment, which includes the following material amendments (along with certain other clarifying changes):

- Increases the number of shares authorized for use in making awards under the Plan by 3,750,000 shares to 4,094,428. After taking into the options for 370,000 shares granted to our named executive officers on December 10, 2021 and options for an aggregate of 396,000 shares awarded to other employees on the same date, all of which are conditioned on approval of this Proposal No. 3 (the "Contingent Grants"), will result in an aggregate 3,328,000 shares being available for future grants if the Amendment is approved.
- Increases the fair market value of cash or share awards a non-employee director may be granted in a calendar year under the Plan together with any awards granted outside of the Plan from \$500,000 to \$2,000,000 for newly-appointed directors, any lead independent director and any non-employee chair, or \$1,000,000 for each other non-employee director; and

The Company's officers and directors have an interest in this Proposal No. 3 due to their participation in the Plan.

The reason for seeking stockholder approval of Proposal No. 3 is to satisfy certain requirements of (i) the Internal Revenue Code of 1986 (the "Code"), related to incentive stock option plans and (ii) applicable Nasdaq Marketplace Rules. Additionally, the Board believes that to enable the Company to continue to attract and retain personnel of the highest caliber, provide incentive for officers, directors, employees and other key persons and to promote the well-being of the Company, it is in the best interest of the Company and its stockholders to provide to officers, directors, employees, consultants and other independent contractors who perform services for the Company, through the granting of stock options, restricted stock, deferred stock or other stock-based awards, the opportunity to participate in the value and/or appreciation in value of the Company's common stock. On December 10, 2021, based on a review of the 2021 milestones for the Company and each of the NEOs, we awarded options to purchase an aggregate of 370,000 shares of our common stock to our named executive officers, with an exercise price of \$34.57 per share (together with options for an aggregate of 396,000 shares awarded to other employees on the same date, the "Contingent Grants"). The Contingent Grants are subject to approval of this Proposal No. 3 and effectiveness of the Amendment. Twenty-five percent of each Contingent Grant will vest on the first anniversary of the grant date, with the remainder vesting in equal increments on each successive one-month anniversary thereafter for the next thirty-six months. If the Amendment is not approved, the Contingent Grants will be canceled in their entirety.

We strongly believe that the approval of the Amendment is essential to our continued success. The Company's directors and officers further believe that equity awards motivate high levels of performance, align the interests of our employees and stockholders by giving directors, employees and consultants the perspective of an owner with an equity stake in the Company, and provide an effective means of recognizing their contributions to the success of the Company.

If our stockholders do not approve this Proposal No. 3, we will be unable to use equity compensation to the extent needed to provide competitive compensation to motivate our employees. In addition, as described above, on December 10, 2021, our named executive officers were awarded the Contingent Grants, representing options to purchase an aggregate of 370,000 shares of our common stock, and other non-executive employees were awarded options to purchase an aggregate of 396,000 shares of our common stock on the same date. The Contingent Grants are subject to the effectiveness of the Amendment, and such awards will be canceled if this Proposal No. 3 is not approved. If this Proposal No. 3 is not approved at the Annual Meeting, we could be required to increase cash compensation to attract, retain and motivate our employees, which may compromise funding of our development programs.

The Company's officers and directors believe that equity awards are necessary to remain competitive in our industry and are essential to recruiting and retaining the highly qualified employees, directors and consultants who help the Company meet its goals. If the Amendment is not approved at the Annual Meeting and we are then unable to offer equity awards as a component of compensation on agreeable terms, we will be at a disadvantage relative to other companies which will be able to offer more attractive and broad-based compensation packages to their executive officers, directors, and other key employees. The Company's officers and directors believe that the ability to grant equity awards is, now more than ever, critical to the future success of the Company and in the best interests of the Company's stockholders.

Since calendar year 2021, the United States job market has been characterized by a historic "war for talent," with millions of Americans changing employers each month. The causes are varied, and include the rolling impacts of the COVID-19 pandemic and a seeming country-wide shortage of skilled labor. The phenomenon has been dubbed the "Great Resignation." Further, global market volatility and uncertainty has increased due to lingering impacts of the COVID-19 pandemic, inflation and global events such as armed conflict in Ukraine and surrounding European areas which began in February 2022. This volatility may now or in the future impact the market value of our common stock.

Equity awards form a core component of our compensation philosophies at it relates to our officers, other employees and non-employee directors. This Proposal No. 3 will give us flexibility as to any compensation packages we offer, which we believe is critical during times of extremely volatility and uncertainty. As a result, we believe our ability to hire, appoint, and retain key personnel would be negatively impacted by a failure to approve this Proposal No. 3.

The general description of the Amendment set forth below is qualified in its entirety by and subject to the full text of the form of proposed amendment, which is attached as <u>Appendix A</u> hereto. If our stockholders fail to approve the Amendment, the Amendment will not be given effect and the current plan will continue as in effect prior to the Amendment.

Summary of the Proposed Amendment to the Amended and Restated 2019 Omnibus Equity Incentive Plan

Prior to the adoption of the Amendment, up to a maximum of 5,750,000 shares of common stock have been authorized for settlement of awards granted under the current plan. The Amendment increases the number of shares of common stock that are available for delivery pursuant to Awards granted under the Plan by 3,750,000 to 4,094,428 shares. If this Proposal No. 3 is approved, an aggregate of 3,328,000 shares will be available for future grant under the Plan. The 3,328,000 shares reserved for future grants under the Plan reflects the 344,428 shares that were available under the Plan as of March 31, 2022, plus the 3,750,000 newly requested shares, less 370,000 shares underlying the Contingent Grants to our NEOs and 396,000 shares reserved for issuance in connection with the Contingent Grants to non-executive employees. Up to a maximum of 3,328,000 shares may be issued pursuant to the exercise of incentive stock options.

Prior to the adoption of the Amendment, other than in the case of substitute awards, a non-employee director may not be granted awards for cash or shares that together with any awards granted outside of the Plan have a fair market value (determined as of the date of rant) in excess of \$500,000 in a single calendar year. If this Proposal No. 3 is approved, this amount will be increased to (i) \$2,000,000 for any non-employee director who is a lead independent director, director chair or a newly-appointed director and (ii) \$1,000,000 for each other non-employee director.

Summary of the Plan, as Amended by the Amendment

The Plan covers the grant of awards to the Company's employees (including officers), non-employee consultants and non-employee directors and those of the Company's affiliates. As of December 31, 2021, 177 employees (including officers) and five non-employee directors were eligible to participate in the Plan. In addition, the Plan permits the grant of awards (other than incentive stock options) to individuals who are expected to become an employee to, non-employee consultant or non-employee director of the Company or any of its affiliates within a reasonable period of time after the grant of an award. Any award granted to any individual who is expected to become an employee, non-employee consultant or non-employee director will be automatically terminated and cancelled without consideration if the individual does not begin performing services for the Company or any of its affiliate within twelve (12) months after the grant date. For purposes of the Plan, the Company's affiliates include any corporation, partnership, limited liability company, joint venture or other entity, with respect to which we, directly or indirectly, own either (i) stock of a corporation possessing more than fifty percent (50%) of the total combined voting power of all classes of stock entitled to vote, or more than fifty percent (50%) of the total value of all shares of all classes of stock of such corporation, or (ii) an aggregate of more than fifty percent (50%) of the profits interest or capital interest of any non-corporate entity.

The compensation committee of the Board administers the Plan. The compensation committee may delegate any or all of its administrative authority to the Company's Chief Executive Officer or to a management committee except with respect to awards to executive officers who are subject to Section 16 of the Exchange Act. In addition, the full Board must serve as the committee with respect to any awards to the Company's non-employee directors.

The stock delivered to settle awards made under the Plan may be authorized and unissued shares or treasury shares, including shares repurchased by the Company for purposes of the Plan. If any shares subject to any award granted under the Plan (other than a substitute award as described below) is forfeited or otherwise terminated without delivery of all or a portion of such shares, including on payment in shares on exercise of a stock appreciation right (or if such shares are returned to the Company due to a forfeiture restriction under such award), the shares subject to such awards will again be available for issuance under the Plan. Any shares that are withheld or applied as payment (either actually or by attestation) for shares issued upon exercise of an award or for the withholding or payment of taxes due upon exercise of the award will not be treated as having been delivered under the Plan and will, at the discretion of the Company, be available for grant under the Plan.

If a dividend or other distribution (whether in cash, shares of common stock or other property), recapitalization, forward or reverse stock split, subdivision, consolidation or reduction of capital, reorganization, merger, consolidation, scheme of arrangement, split-up, spin-off or combination involving the Company or repurchase or exchange of our shares or other securities, or other rights to purchase shares of the Company's securities or other similar transaction or event affects the common stock such that the committee determines that an adjustment is appropriate in order to prevent dilution or enlargement of the benefits (or potential benefits) provided to grantees under the Plan, the committee will make an equitable change or adjustment as it deems appropriate in the number and kind of securities subject to awards (whether or not then outstanding) and the related exercise price relating to an award in order to prevent dilution or enlargement of the benefits or potential benefits or potential benefits intended to be made available under the Plan.

Other than in the case of substitute awards, (i) a non-employee director who is a lead independent director or a director chair or a newly-appointed director may not be granted awards for cash or shares that together with any awards granted outside of the Plan have a fair market value (determined as of the date of grant) in excess of \$2,000,000 in a single calendar year and (ii) any other non-employee director may not be granted awards for cash or shares that together with any awards granted outside of the date of grant) in excess of \$1,000,000 in a single calendar year and (ii) any other non-employee director may not be granted awards for cash or shares that together with any awards granted outside of the Plan have a fair market value (determined as of the date of grant) in excess of \$1,000,000 in a single calendar year.

Types of Awards

The Plan permits the granting of any or all of the following types of awards to all grantees:

- stock options, including incentive stock options ("ISOs");
- stock appreciation rights ("SARs");
- restricted shares;
- · deferred stock and restricted stock units;
- performance units and performance shares;

- dividend equivalents;
- · bonus shares; and
- · other stock-based awards.

Generally, awards under the Plan are granted for no consideration other than prior and future services. Awards granted under the Plan may, in the discretion of the committee, be granted alone or in addition to, in tandem with or in substitution for, any other award under the Plan or other plan of ours; provided, however, that if SARs are granted in tandem with ISOs, the SARs and ISOs must have the same grant date and term and the exercise price of the SARs may not be less than the exercise price of the ISOs. The material terms of each award will be set forth in a written award agreement between the grantee and us.

Stock Options and SARs

The committee is authorized to grant SARs and stock options (including ISOs except that an ISO may only be granted to an employee of the Company or one of its subsidiary corporations). A stock option allows a grantee to purchase a specified number of shares of the common stock at a predetermined price per share (the "exercise price") during a fixed period measured from the date of grant. A SAR entitles the grantee to receive the excess of the fair market value of a specified number of shares on the date of exercise over a predetermined exercise price per share. The exercise price of an option or an SAR will be determined by the committee and set forth in the applicable award agreement but (other than in the case of substitute awards) the exercise price may not be less than the fair market value of a share of common stock on the grant date. The term of each option or SAR is determined by the committee and set forth in the term may not exceed 10 years. Options may be exercised by payment of the purchase price through one or more of the following means: payment in cash (including personal check or wire transfer), by delivering shares of the common stock previously owned by the grantee, or with the approval of the committee, by delivery of shares of common stock acquired upon the exercise of such option or by delivering restricted shares. The committee may also permit a grantee to pay the exercise price of an option through the sale of shares acquired upon exercise of the option through a broker-dealer to whom the grantee has delivered irrevocable instructions to deliver sales proceeds sufficient to pay the purchase price and any applicable tax withholding amounts to the Company.

Restricted Shares

The committee may award restricted shares consisting of shares of common stock which remain subject to a risk of forfeiture and may not be disposed of by grantees until certain restrictions established by the committee lapse. The vesting conditions may be service-based (i.e., requiring continuous service for a specified period) or performance-based (i.e., requiring achievement of certain specified performance objectives) or both. A grantee receiving restricted shares will have all of the rights of a stockholder, including the right to vote the shares and the right to receive any dividends, except as otherwise provided in the applicable award agreement. Upon termination of the grantee's affiliation with the Company during the restriction period (or, if applicable, upon the failure to satisfy the specified performance objectives during the restriction period), the restricted shares will be forfeited as provided in the applicable award agreement. Stock dividends and deferred cash dividends issued with respect to restricted shares will be subject to the same restrictions and other terms as apply to the restricted shares with respect to which such dividends are issued.

Deferred Stock and Restricted Stock Units

The committee may also grant deferred stock awards and/or restricted stock unit awards. A deferred stock award is the grant of a right to receive a specified number of shares of common stock at the end of specified deferral periods or upon the occurrence of a specified event, which satisfies the requirements of Section 409A of the Code. A restricted stock unit award is the grant of a right to receive a specified number of shares of common stock upon lapse of a specified forfeiture condition (such as completion of a specified period of service or achievement of certain specified performance objectives). If the service condition and/or specified performance objectives are not satisfied during the restriction period, the award will lapse without the issuance of the shares underlying such award.



Restricted stock units and deferred stock awards carry no voting or other rights associated with stock ownership until the shares underlying the award are delivered in settlement of the award. Unless otherwise determined by the Committee, a grantee will have the rights to receive dividend equivalents in respect of deferred stock and/or restricted stock units, which dividend equivalents will be deemed reinvested in additional shares of deferred stock or restricted stock units, as applicable, and which will remain subject to the same forfeiture conditions applicable to the deferred stock or restricted stock units to which such dividend equivalents relate.

Performance Units

The committee may grant performance units, which entitle a grantee to cash or shares conditioned upon the fulfillment of certain performance conditions and other restrictions as specified by the committee and reflected in the applicable award agreement. The initial value of a performance unit will be determined by the committee at the time of grant. The committee will determine the terms and conditions of such awards, including performance and other restrictions placed on these awards, which will be reflected in the applicable award agreement.

Performance Shares

The committee may grant performance shares, which entitle a grantee to a certain number of shares of common stock, conditioned upon the fulfillment of certain performance conditions and other restrictions as specified by the committee and reflected in the applicable award agreement. The committee will determine the terms and conditions of such awards, including performance and other restrictions placed on these awards, which will be reflected in the applicable award agreement.

Bonus Shares

The committee may grant fully vested shares of common stock as bonus shares in recognition of past performance or as an inducement to become an employee, non-employee consultant or director on such terms and conditions as specified in the applicable award agreement.

Dividend Equivalents

The committee is authorized to grant dividend equivalents, which provide a grantee the right to receive payment equal to the dividends paid on a specified number of shares of common stock. Dividend equivalents may be paid directly to grantees or may be deferred for later delivery under the Plan. No dividend equivalents may be granted with respect to options or SARs. If deferred such dividend equivalents may be credited with interest or may be deemed to be invested in shares of common stock or in other property. Any dividend equivalents granted in conjunction with any award that is subject to forfeiture conditions will remain subject to the same forfeiture conditions applicable to the award to which such dividend equivalents relate.

Other Stock-Based Awards

The Plan authorizes the committee to grant awards that are valued in whole or in part by reference to or otherwise based on the Company's securities. The committee determines the terms and conditions of such awards, including whether awards are paid in shares or cash.

Merger, Consolidation or Similar Corporate Transaction

If there is a merger or consolidation of the Company with or into another corporation or a sale of substantially all of the Company's stock, or, collectively, a Corporate Transaction, and the outstanding awards are not assumed by surviving company (or its parent company) or replaced with economically equivalent awards granted by the surviving company (or its parent company), the committee will cancel any outstanding awards that are not vested and non-forfeitable as of the consummation of such Corporate Transaction (unless the committee accelerates the vesting of any such awards) and with respect to any vested and non-forfeitable awards, the committee may either (i) allow all grantees to exercise options and SARs within a reasonable period prior to the consummation of the Corporate Transaction and cancel any outstanding options or SARs that remain unexercised upon consummation of the Corporate Transaction, or (ii) cancel any or all of such outstanding awards (including options and SARs) in exchange for a payment (in cash, or in securities or other property) in an amount equal to the amount that the grantee would have received (net of the exercise price with respect to any options or SARs) if the vested awards were settled or distributed or such vested options and SARs were exercised immediately prior to the consummation of the Corporate Transaction. If an exercise price of the option or SAR exceeds the fair market value of common stock and the option or SAR is not assumed or replaced by the surviving company (or its parent company), such options and SARs will be cancelled without any payment to the grantee.



Further Amendments to the Plan

The Plan may be amended, altered, suspended, discontinued or terminated by the Board without further stockholder approval, unless such approval of an amendment or alteration is required by law or regulation or under the rules of any stock exchange or automated quotation system on which the common stock is then listed or quoted. Thus, stockholder approval will not necessarily be required for amendments which might increase the cost of the Plan or broaden eligibility. Stockholder approval will not be deemed to be required under laws or regulations that condition favorable treatment of grantees on such approval, although the Board may, in its discretion, seek stockholder approval in any circumstance in which it deems such approval advisable.

The terms of any outstanding option or stock appreciation right may not be amended: (i) to reduce the exercise price of such option or stock appreciation right, or (ii) cancel any outstanding option or stock appreciation right in exchange for other options or stock appreciation rights with an exercise price that is less than the exercise price of the cancelled option or stock appreciation right or for any cash payment (or shares having a fair market value) in an amount that exceeds the excess of the fair market value of the shares underlying such cancelled option or stock appreciation right over the aggregate exercise price of such option or stock appreciation right or for any other award, or (iii) take any other action with respect to an option or stock appreciation right that would be treated as a repricing under the rules and regulations on the principal securities exchange on which the shares are traded, in each case without stockholder approval. The foregoing restrictions will not apply (i) unless the Company has a class of stock that is registered under Section 12 of the Exchange Act or (ii) to any adjustment allowed under the provisions of the Plan relating to adjustments for changes in capitalization, corporate transactions, or a liquidation or dissolution.

In addition, subject to the terms of the Plan, no amendment or termination of the Plan may materially and adversely affect the right of a grantee without the consent of the grantee under any award granted under the Plan.

Unless earlier terminated by the Board, the Plan will terminate when no shares remain reserved and available for issuance or, if earlier, on the tenth anniversary of the most recent effective date of the Plan.

Federal Income Tax Consequences

The following discussion summarizes the certain Federal income tax consequences of the Plan based on current provisions of the Code, which are subject to change. This summary is not intended to be exhaustive and does not address all matters which may be relevant to a particular grantee based on his or her specific circumstances. The summary expressly does not discuss the income tax laws of any state, municipality, or non-U.S. taxing jurisdiction, or the gift, estate, excise (including the rules applicable to deferred compensation under Code Section 409A or golden parachute excise taxes under Code Section 4999), or other tax laws other than federal income tax law. The following is not intended or written to be used, and cannot be used, for the purposes of avoiding taxpayer penalties. Because individual circumstances may vary, the Company advises all grantees to consult their own tax advisors concerning the tax implications of awards granted under the Plan.

Options. A recipient of a stock option will not have taxable income upon the grant of the stock option. For stock options that are not incentive stock options, the grantee will recognize ordinary income upon exercise in an amount equal to the value of any cash received, plus the difference between the fair market value of the freely transferable and non-forfeitable shares received by the grantee on the date of exercise and the exercise price. The grantee's tax basis in such shares will be the fair market value of such shares on the date the option is exercised. Any gain or loss recognized upon any later disposition of the shares generally will be a long-term or short-term capital gain or loss.

The acquisition of shares upon exercise of an incentive stock option will not result in any taxable income to the grantee, except, possibly, for purposes of the alternative minimum tax. The gain or loss recognized by the grantee on a later sale or other disposition of such shares will either be long-term capital gain or loss or ordinary income, depending upon whether the grantee holds the shares for the legally-required period (currently two years from the date of grant and one year from the date of exercise). If the shares are not held for the legally-required period, the grantee will recognize ordinary income equal to the lesser of (i) the difference between the fair market value of the shares on the date of exercise and the exercise price, or (ii) the difference between the sales price and the exercise price. If the grantee holds the shares for the legally required holding period, the grantee's tax basis in such shares will be the exercise price paid for the shares.

Generally, a company can claim a federal income tax deduction equal to the amount recognized as ordinary income by a grantee in connection with the exercise of a stock option, but not relating to a grantee's capital gains. Accordingly, the Company will not be entitled to any tax deduction with respect to an incentive stock option if the grantee holds the shares for the legally-required period.

Restricted Shares. Unless a grantee makes the election described below, a grant of restricted shares will not result in taxable income to the grantee or a deduction for the Company in the year of grant. The value of such restricted shares will be taxable to a grantee as ordinary income in the year in which the restrictions lapse. Alternatively, a grantee may elect to treat as income in the year of grant the fair market value of the restricted stock on the date of grant, provided the grantee makes the election within 30 days after the date of such grant. If such an election were made, the grantee would not be allowed to deduct at a later date the amount included as taxable income if the grantee should forfeit the shares of restricted stock. The amount of ordinary income recognized by a grantee is deductible by the Company in the year such income is recognized by the grantee, provided such amount constitutes reasonable compensation to the grantee. If the election described above is not made, then prior to the lapse of restrictions, dividends paid on the shares subject to such restrictions will be taxable to the grantee as additional compensation in the year received, and the Company will be allowed a corresponding deduction.

Other Awards. Generally, when a grantee receives payment in settlement of any other award granted under the Plan, the amount of cash and the fair market value of the shares received will be ordinary income to such grantee, and the Company will be allowed a corresponding deduction for federal income tax purposes.

Generally, when a grantee receives payment with respect to dividend equivalents, the amount of cash and the fair market value of any shares or other property received will be ordinary income to such grantee. The Company will be entitled to a federal income tax deduction in an amount equal to the amount the grantee includes in income.

If the grantee is an employee or former employee, the amount the grantee recognizes as ordinary income in connection with an award (other than an incentive stock option) is subject to tax withholding.

Limitations on Deductions. Code Section 162(m) as amended by the Tax Cuts and Jobs Act, limits the Federal income tax deductibility of compensation paid to any covered employee to \$1 million per fiscal year. A "covered employee" is any individual who (i) is the Company's principal executive officer or principal financial officer at any time during the then current fiscal year, (ii) is one of the three highest paid named executive officers (other than the principal executive officer or principal financial officer) during the then current fiscal year or (iii) was a covered employee in any prior fiscal year beginning after December 31, 2016.

Deferred Compensation. Under Section 409A of the Code. Any award that is deemed to be a deferral arrangement (excluding certain exempted short-term deferrals) will be subject to Code Section 409A. Generally, Code Section 409A imposes accelerated inclusion in income and tax penalties on the recipient of deferred compensation that does not satisfy the requirements of Code Section 409A. Options and restricted shares granted under the Amended and Restated Omnibus Plan will typically be exempt from Code Section 409A. Other awards may result in the deferral of compensation. Awards under the Plan that may result in the deferral of compensation are intended to be structured to meet applicable requirements under Code Section 409A. Certain grantee elections and the timing of distributions relating to such awards must also meet requirements under Code Section 409A in order for income taxation to be deferred and tax penalties avoided by the grantee upon vesting of the award.

2021 Inducement Equity Incentive Plan

In October 2021, the Company adopted the 2021 Inducement Equity Incentive Plan effective as of October 15, 2021 which covers the award of up to 1,000,000 shares of common stock (the "Inducement Plan"). Approval of the Company's stockholders is not required as a condition to the effectiveness of the Inducement Plan for so long as the plan is in compliance with Nasdaq inducement plan rules. On October 20, 2021, the Company filed a Form S-8 with the United States Securities and Exchange Commission to register the 1,000,000 shares issuable pursuant to awards under the Inducement Plan. As of December 31, 2021, a total of 756,300 shares remain available for future issuance under the Inducement Plan, subject to the terms of the Inducement Plan. In April 2022, the compensation committee approved a proposal to reduce the total number of shares available for future issuance under the Inducement Plan was to 130,000.

New Plan Benefits

The following Contingent Grants were made effective December 10, 2021, and are subject to stockholder approval of the Amendment as described in this Proposal No. 3:

Name	Dollar Value	Number of Shares
Joseph E. Payne	\$ 5,185,500	150,000
Andy Sassine	\$ 2,938,450	85,000
Dr. Padmanabh Chivukula	\$ 2,938,450	85,000
Lance Kurata	\$ 1,728,500	50,000
All Current Executive Officers	\$ 12,790,900	370,000
Other Employees	\$ 13,689,720	396,000

Benefits Received Pursuant to Company-Adopted Plans; Year-Ended December 31, 2021

In view of the discretionary authority vested in the compensation committee and the Board under the Plan and Inducement Plan, and because any benefit under the Plan and Inducement Plan may depend on a variety of factors, including the value of common stock from time to time, it is not possible to estimate or determine the number of shares or the value of any awards that may be made to any of the Company's directors, executive officers or employees under the Plan or Inducement Plan.

Awards Outstanding Under Existing Grants.

As of March 31, 2022:

- the Company had 26,407,221 shares of common stock issued and outstanding;
- the Company had outstanding grants of approximately 4,363,682 stock options, with a weighted average exercise price of \$43.72, weighted average remaining contractual life of 7.98 years, and 2,519,804 unvested stock options, prior to the Amendment and the Contingent Grants;
- the Company had 344,428 shares available for future issuance under Plan, prior to the Amendment and the Contingent Grants;
- the Company had 745,300 shares available for future issuance under Inducement Plan;
- the outstanding 4,363,682 stock options and the 1,089,728 shares available for future issuance under the Plan, prior to the Amendment and the Contingent Grants, and the Inducement Plan, together represented approximately 17% of the Company's outstanding shares of common stock.

Subject to approval of the Amendment by the Company's stockholders pursuant to this Proposal No. 3, the Company will have outstanding equity awards totaling 4,363,682 stock options (as of March 31, 2022) plus the existing 1,089,728 shares available for future issuance (as of March 31, 2022) plus 3,750,000 additional shares available for issuance, which together will represent approximately 26% of the Company's outstanding shares of common stock, based on the Company's outstanding shares of common stock as of March 31, 2022.

In April 2022, the compensation committee approved a proposal to reduce the total number of shares available for future issuance under the Inducement Plan to 130,000. As of the date hereof, the Company has 130,000 shares available for future issuances under the Inducement Plan, which together with the 344,428 shares available for future issuance under the Plan prior to the Amendment and the Contingent Grants represent an aggregate of 474,428 shares of our common stock, or approximately 15% of our outstanding shares of common stock as of April 29, 2022.

Required Vote

The approval of the Amendment requires the affirmative "FOR" vote of a majority of the shares present in person or represented by proxy at the annual meeting and entitled to vote on the proposal. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions have the same effect as a vote against the proposal. Broker non-votes will not affect the outcome of voting on this proposal.

Board Recommendation

Our Board recommends a vote "FOR" the Approval of the Amendment.

TO APPROVE, BY NON-BINDING ADVISORY VOTE, THE FREQUENCY OF FUTURE NON-BINDING ADVISORY VOTES ON RESOLUTIONS APPROVING FUTURE NAMED EXECUTIVE OFFICER COMPENSATION

In Proposal No. 2 above, the Company is asking its stockholders to vote on a non-binding advisory resolution on named executive officer compensation and the Company will provide this type of advisory vote at least once every three years. Pursuant to Section 14A of the Exchange Act and the related rules of the SEC, in this Proposal No. 4 the Company is asking its stockholders to vote on the frequency of future non-binding advisory votes on named executive officer compensation. This Proposal No 4, commonly known as a "Say-on-Frequency" or "Say-When-on-Pay" proposal, gives our stockholders the opportunity to express their views on whether future advisory votes on the compensation of our named executive officers should occur once every year, every two years or every three years, or abstain from voting.

The Board believes that an advisory vote on executive compensation every three years continues to be the most appropriate policy for the Company at this time, and recommends stockholders vote for future non-binding advisory votes on named executive officer compensation to occur every three years. The rules of the SEC permit the Company to solicit this advisory vote every three years, and the Company believes that corporate resources, and management and employee attention and efforts, are better served by soliciting this advisory vote every three years. As described elsewhere in this proxy statement, our named executive officer compensation programs are designed to promote long-term connection between pay and performance for the benefit of the Company and our stockholders, and the named executive officer compensation disclosures are and will continue to be made annually.

A vote on this Proposal No. 4 is advisory, and therefore not binding on us, our compensation or nominating and corporate governance committees, or our Board, and will not be interpreted as overruling a decision by, or creating or implying any additional fiduciary duty for, the compensation or nominating and corporate governance committees, or our Board. Nevertheless, our compensation and nominating and corporate governance committees, and Board, value the opinions of our stockholders and will take into account the outcome of this vote when making future decisions regarding the frequency of holding future advisory votes on the compensation of our named executive officers.

Required Vote

You have four choices for voting on this proposal. You may indicate your preference, on an advisory basis, as to whether future advisory votes on named executive officer compensation should be conducted every ONE YEAR, TWO YEARS, or THREE YEARS. You may also ABSTAIN from voting. Stockholders are not voting to approve or disapprove the recommendation of the Board, and the outcome of the vote is not binding on us. Rather, the frequency that receives the greatest number of votes cast by the voting power of the shares of our common stock present in person (including virtually) or represented by proxy at the Annual Meeting and entitled to vote thereon will be considered the preferred frequency of our stockholders. Broker non-votes and abstentions will have no effect on the outcome of the vote.

Board Recommendation

Our Board of Directors recommends a vote for "THREE YEARS" as the preferred frequency of future votes on the non-binding advisory resolution approving the Company's Named Executive Officer compensation.



RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our audit committee has appointed E&Y as the independent registered public accounting firm to audit our consolidated financial statements for the year ending December 31, 2022.

Notwithstanding such appointment and even if our stockholders ratify such appointment, our audit committee, in its discretion, may appoint another independent registered public accounting firm at any time during the year if it believes that such a change would be in the best interests of Arcturus and its stockholders. Our audit committee is submitting the appointment of E&Y to our stockholders because we value our stockholders' views on such appointment and as a matter of good corporate governance. If the appointment is not ratified by our stockholders, our audit committee may consider appointing another independent registered public accounting firm. A representative of E&Y is expected to be virtually present at the annual meeting, and will be available to respond to appropriate questions following the virtual annual meeting, but is not expected to make a statement.

Fees Paid to the Independent Registered Public Accounting Firm

The following table sets forth the fees billed to us and our subsidiaries by Ernst & Young LLP, an independent registered public accounting firm, which served as our principal accountant for the years ended December 31, 2021 and 2020, respectively.

(US Dollars in thousands)	2021			2020		
Audit fees ⁽¹⁾	\$	1,020	\$	1,212		
Audit-related fees		—		—		
Tax fees ⁽²⁾		49		213		
All other fees		—		_		
Total	\$	1,069	\$	1,425		

- (1) Includes fees for professional services rendered by our principal accountant in connection with the audit of our consolidated annual financial statements and services that would normally be provided by our principal accountant in connection with statutory and regulatory filings or engagements.
- (2) Tax fees are fees for services (including tax services provided in connection with our redomicile to the United States) rendered by our respective principal accountants in connection with tax compliance, tax planning and tax advice.

All fees described above were pre-approved by the audit committee.

Auditor Independence

In 2021, there were no other professional services provided by E&Y that would have required our audit committee to consider their compatibility with maintaining the independence of E&Y.

Pre-Approval Policy

Our audit committee has a pre-approval policy for the engagement of our independent registered public accounting firm to perform certain audit and nonaudit services. Pursuant to this policy, which is designed to assure that such engagements do not impair the independence of our auditors, the audit committee pre-approves annually a catalog of specific audit and non-audit services in the categories of audit services, audit-related services and tax services that may be performed by our independent registered public accounting firm. If a type of service, that is to be provided by our auditors, has not received such general pre-approval, it will require specific pre-approval by our audit committee. The policy prohibits retention of the independent registered public accounting firm to perform the prohibited non-audit functions defined in applicable SEC rules.

Required Vote

Ratification of the appointment of E&Y as our independent registered public accounting firm for the year ending December 31, 2022 requires the affirmative "FOR" vote of a majority of the shares present in person or represented by proxy at the annual meeting and entitled to vote on the proposal. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions have the same effect as a vote against the proposal. Broker non-votes will have no effect on this proposal.

Board Recommendation

Our Board recommends a vote "FOR" the ratification of the appointment of E&Y as our independent registered public accounting firm for the year ending December 31, 2022.

REPORT OF THE AUDIT COMMITTEE

The audit committee is a committee of our Board comprised solely of independent directors as required by the listing standards of Nasdaq and rules and regulations of the SEC. The audit committee operates under a written charter approved by our Board, which is available on the corporate governance section of our web site at http://ir.arcturusrx.com/governance-highlights. The audit committee held six meetings in 2021. The meetings of the audit committee are designed to facilitate and encourage communication among the audit committee, us and our independent auditor. The composition of the audit committee, the attributes of its members and the responsibilities of the audit committee, as reflected in its charter, are intended to comply with applicable requirements for corporate audit committees. The audit committee reviews and assesses the adequacy of its charter and its performance on an annual basis.

With respect to our financial reporting process, our management is responsible for (i) establishing and maintaining internal controls and (ii) preparing our consolidated financial statements. Arcturus' independent registered public accounting firm is responsible for performing an independent audit of Arcturus' consolidated financial statements in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States), or PCAOB, and to issue a report thereon. It is the responsibility of the audit committee to oversee these activities. Specifically, the audit committee is responsible for the appointment, compensation, and general oversight of the external auditor, as well as fee negotiations with the external auditor. It is not the responsibility of the audit committee to prepare Arcturus financial statements. These are the fundamental responsibilities of management. In the performance of its oversight function, the audit committee has:

- · reviewed and discussed the audited financial statements for fiscal year 2021 with the management of Arcturus;
- discussed with E&Y, Arcturus' independent registered public accounting firm for fiscal year 2021, the matters required to be discussed by Auditing Standard No. 16, Communications with Audit Committees, as amended (AICPA, Professional Standards, Vol. 1, section 380), and as adopted by the PCAOB in Rule 3200T; and
- received the written disclosures and the letter from E&Y as required by applicable requirements of the PCAOB regarding E&Y's communications with the audit committee concerning independence, and has discussed with E&Y its independence.

Based on the audit committee's review of the audited financial statements and the various discussions with management and E&Y, the audit committee recommended to our Board that the audited financial statements be included in our annual report on Form 10-K for the fiscal year ended December 31, 2021 for filing with the SEC.

James Barlow Dr. Edward Holmes Dr. Magda Marquet

This report of the audit committee shall not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A promulgated by the SEC or Section 18 of the Exchange Act, and shall not be deemed incorporated by reference into any prior or subsequent filing by Arcturus under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except to the extent Arcturus specifically requests that the information be treated as "soliciting material" or specifically incorporates it by reference.



EXECUTIVE OFFICERS

The names of our executive officers, their ages, their positions with us and other biographical information are set forth below. There are no family relationships among any of our directors and executive officers.

Name	Age	Position(s)
Joseph E. Payne	50	President and Chief Executive Officer
Andy Sassine	57	Chief Financial Officer
Dr. Padmanabh Chivukula	43	Chief Scientific Officer and Chief Operating Officer
Lance Kurata	52	Chief Legal Officer

Biographical information for Joseph E. Payne and Andy Sassine is set forth above in the section titled "Board of Directors and Corporate Governance."

Dr. Padmanabh Chivukula has served as our Chief Scientific Officer and Chief Operating Officer since 2013. Dr. Chivukula has an exceptional and technically solid foundation in nanoparticle technology. From 2008 until February 2013, Dr. Chivukula was employed by Nitto Denko Corporation, where his titles included Group Leader and Chief Scientist. Dr. Chivukula brings over 15 years of experience in drug delivery and therapeutic drug development, including leading the polymeric RNAi research department at Nitto. Dr. Chivukula has a Ph.D. in Pharmaceutical Chemistry from the University of Utah where he specialized in nanoparticle technology.

Lance Kurata has served as our Chief Legal Officer since August 2020. Prior to joining Arcturus, Mr. Kurata was Partner and Chair of West Coast Technology Transactions at Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, PC. From 2002 to 2006, he was a partner at Fish & Richardson, where he was a member of the corporate group and nationwide head of the technology transactions practice. From 1996 until 2002, Mr. Kurata practiced corporate law at Brobeck Phleger & Harrison, specializing in strategic collaborations, public and private financings, mergers and acquisitions and corporate governance. Mr. Kurata obtained his B.A. from University of California, Los Angeles and he earned his J.D. from Stanford Law School.

Other Significant Employees

Dr. Kelly Lindert has served as our Chief Development Officer, Vaccines, since February 2022. From August 2020 to February 2022, Dr. Lindert served as our Senior Vice President and Head of Vaccines. Dr. Lindert joined Arcturus from Moderna, where she was Head of Metabolic Rare Diseases Clinical Development from October 2018 to July 2020. Dr. Lindert has over 20 years of experience in the pharma and biotech industries and spent nearly ten years working on vaccines, including pandemic vaccines, at Acambis and Novartis. At Novartis she rose to serve as Head of Development and led the team for the approval of Fluad® and the first quadrivalent cell-based influenza vaccine in the US. Dr. Lindert received her medical degree at the University of Chicago Pritzker School of Medicine, trained in Urology at Stanford, and received her B.S. in biology/biological sciences from Vassar College.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Introduction

The Compensation Discussion and Analysis is designed to provide our stockholders with an understanding of our executive compensation philosophy and decision-making process. It discusses the principles underlying the structure of the compensation arrangements for our Chief Executive Officer, our Chief Financial Officer, and our other three most highly compensated executive officers who were serving as executive officers on December 31, 2021 (the "NEOS"). Unless noted otherwise, any reference within the Compensation Discussion and Analysis to decisions made by the board of directors refers to the decisions made by the independent members of the board of directors only. This Compensation Discussion and Analysis primarily focuses on the compensation of our NEOs, as identified in the table below.

Name	Title
Joseph E. Payne	President and Chief Executive Officer
Dr. Padmanabh Chivukula	Chief Scientific Officer, Chief Operating Officer
Andy Sassine	Chief Financial Officer
Dr. Steven Hughes (1)	Former Chief Medical Officer
Lance Kurata	Chief Legal Officer

(1) Effective February 14, 2022, Dr. Hughes stepped down from his position as an employee with the Company, and currently supports the Company and its programs in the role of Strategic Clinical Advisor.

Our current compensation programs for the NEOs are determined and approved by our board of directors, acting at the recommendation of the compensation committee. As described in more detail above under the caption "Board Meetings and Committees—Compensation Committee," the compensation committee takes into account Mr. Payne's recommendations regarding the compensation for our executive officers, although Mr. Payne does not participate in the deliberations or determinations of his own compensation. The other NEOs did not have any role in determining or recommending the form or amount of compensation paid to any of our executive officers.

Company Performance Highlights

In assessing the appropriate level of compensation for our executive officers, we take into account the overall performance of the Company against the specific annual corporate objectives established by the board of directors at the beginning of that year, as well as qualitative considerations related to drug discovery and development, drug commercialization, and financial activities (including financing).

The biotechnology industry is characterized by stock price volatility and, as a result, our focus on pay-for-performance is based on an assessment of the level of the Company's achievement against those specific objectives. For more information, see the section titled "Company Performance Objectives" in this proxy statement. In addition to considering the Company's accomplishments and progress each year, we also think it is important to consider the long-term performance of the executive leadership team. We believe that the skills, creativity and dedication of executive leadership have led to numerous significant accomplishments, including the following from January 2021 through the date hereof:

LUNAR-COV19; ARCT-154: we began development of two next generation vaccine candidates designed to elicit an improved neutralizing antibody response to COVID-19. Together with our collaborator, Vinbiocare (as defined below), we advanced ARCT-154, our lead investigational next generation, self-amplifying mRNA-based vaccine for COVID-19 into a Phase 1/2/3 study. The trial is sponsored by Vinbiocare and has completed enrollment and priming vaccination in all portions of the study with over 19,000 participants. In January 2022, we announced data from Phase 1/2 clinical development programs for ARCT-154 and ARCT-165 used as boosters following primary vaccination with Comirnaty®; data demonstrated robust neutralizing antibody responses against SARS-CoV-2 ancestral D614G strain as well as several variants of concern, including Beta, Delta, and Omicron. Vinbiocare initiated submissions for an application for Emergency Use Authorization ("EUA") with the Vietnam Ministry of Health in 2021, and completed and filed the application in February 2022. This EUA application is based on available safety and immunogenicity data from the first 1,000 participants in the Phase 1/2/3a portions of the ongoing study, which is being conducted in Vietnam. Additional efficacy data has been submitted to the Vietnam Ministry of Health as a complement to the data package already under review.



- Vinbiocare Collaboration: we entered into a significant collaboration with Vinbiocare Biotechnology Joint Stock Company ("Vinbiocare"), a
 member company of the Vingroup Joint Stock Company group of companies, pursuant to which we have been providing technical expertise and
 support services to Vinbiocare to assist in the build out of a manufacturing facility in Vietnam. Our global manufacturing footprint continues to
 mature, and our technology transfer to collaborator Vinbiocare's facility in Hanoi, Vietnam continues to progress toward a production capacity of
 200 million doses per year.
- LUNAR-OTC; ARCT-810: we continued to advance ARCT-810, a novel mRNA-based therapeutic candidate for ornithine transcarbamylase (OTC) deficiency in a Phase 1b study. A Phase 2 multiple dose study for ARCT-810 is anticipated to begin screening patients in second quarter 2022, and interim data is anticipated in the second half of 2022. This trial is a randomized, double-blind, placebo-controlled, nested single and multiple ascending dose study, designed to enroll approximately 24 adolescents and adults with OTC deficiency.
- *LUNAR-CF; ARCT-032*: we conducted a series of nonclinical and preclinical studies in our cystic fibrosis program that led us to an optimized formulation and nebulizer system. We continue to progress non-human primate (NHP) toxicological studies for ARCT-032, our mRNA therapeutic candidate for cystic fibrosis, and we plan to file a CTA in the third quarter of 2022.
- *LUNAR-FLU*: we undertook and continue to conduct preclinical evaluation activities for a seasonal influenza vaccine. Based on data from internal programs and human data from our COVID vaccine trials, a self-amplifying mRNA approach has been prioritized over a conventional mRNA approach for the LUNAR-FLU program. A lead STARR[™] mRNA candidate targeting seasonal influenza is expected to be identified in 2022.
- *Manufacturing Platform*: We continued to make significant progress with our manufacturing processes and operations. With our manufacturing partners, we have manufactured current good manufacturing practice ("CGMP") batches yielding significant quantities of clinical trial materials for ARCT-810 (LUNAROTC) and ARCT-021, ARCT-154, and ARCT-165 (our LUNAR-COV19 vaccine candidates).

The above accomplishments, milestones and advancements, together with those achieved by the Company since inception, directly resulted in (1) the development, launch and advancement by the Company of a significant drug candidate pipeline; (2) rapid non-clinical and clinical development of the Company's LUNAR-COVID program; (3) the development and launch of an organization and infrastructure designed to execute on the Company's mission of becoming a leading RNA medicines company; and (4) the establishment of a collaboration that has provided significant economic and clinical benefits, and which we believe has significant future economic potential based anticipated on royalties and sales. We believe that the compensation programs and awards to our NEOs should be evaluated within the context of these significant accomplishments and performance over a sustained period of time.

Compensation Program Objectives and Philosophy

In order to continue the execution and growth of our business as described above, we believe that it is vital that we continue to retain and attract experienced and skilled senior leadership by offering competitive base compensation and benefits, significant performance-based incentives, and the potential for long-term equity compensation. Our goal is to structure a meaningful portion of executive compensation such that it will only have value if management is successful in building significant long-term value for our stockholders.

Our current executive compensation programs are intended to achieve the following four fundamental goals and objectives: (1) to incentivize and reward sustained long-term performance by aligning significant elements of executive compensation with our stockholders' interests, (2) to attract and retain an experienced, highly qualified and motivated executive management team to lead our business, (3) to provide economic rewards for achieving high levels of our performance and individual contribution, and (4) to pay compensation that is competitive, taking into account the experience, skills and performance of the executives required to build and maintain the organization necessary to support our mission to become a leading RNA medicines company.



When structuring our executive compensation programs to achieve our goals and objectives, we are guided by the following philosophies:

- *Alignment with Stockholders' Interests.* Our compensation model should be designed to align the economic interests of our executives with those of our stockholders.
- Pay for Performance. Our compensation model should deliver compensation at or above industry market levels for exceptional performance
 and deliver compensation below the market levels of our industry for years in which the Company does not perform well. Further, all of the
 time-based equity awards are granted as stock options, which we believe are also inherently performance based as they only provide value to
 the executive if stockholders realize a positive return on their investment.
- Total Rewards Program. The total compensation program must balance pay for performance elements with selected static non-performance based elements in order to create a total rewards program that is competitive and will help us attract and retain highly qualified and motivated executives.
- Flexible Approach. The level of compensation provided to executives must take into account each executive's role, experience, tenure, performance and expected contributions to our future success.
- *Focus on Achievement of Business Goals.* The compensation program should be structured so that executives are appropriately incentivized to achieve our short- and long-term goals that are viewed as fundamental to driving value in our business.

We believe that each element of our executive compensation program helps us to achieve one or more of our compensation goals and objectives. For example, we believe that performance-based short-term cash incentive opportunities in combination with equity incentive awards that are earned over time and increase in value only if the Company becomes more valuable are the best way to align our executives' interests with those of our stockholders and pay for performance. We believe that the long-term vesting schedules applicable to equity awards also serve as a significant retention incentive as well as a focus on building long-term stockholder value. Providing base salaries and certain severance protections helps us ensure that we are providing a competitive compensation package that will permit us to attract and retain qualified, experienced and highly skilled executives. We believe that we have created a total compensation program that combines short- and long-term components, cash and equity, and fixed and contingent payments, in proportions that are appropriate to achieve each of our fundamental goals and objectives as described above. We also believe that the structure of our compensation program provides incentives to reward our executives for achieving our long-term goals and objectives, some of the most important of which are building and advancing a robust drug candidate pipeline, entering into new collaboration partnerships and executing on our current collaborations, increasing the skill level and efficiency of our organization and improving our financial performance. We believe that our compensation program has helped us both recruit and retain superior executive talent to continue to build an organization capable of executing on our mission to become a leading RNA medicines company.

In 2021, the CEO's total compensation value, as reported in the Summary Compensation Table for cash compensation and the Grants of Plan Based Award Table for the options granted contingent on stockholder approval (and, therefore not in the Summary Compensation Table), was 52% lower than the value reported in 2020, with roughly 45% fewer options granted than in 2020. The reported value of the CEO's 2020 total compensation was also slightly below the median of the peer group data reviewed. This reduction was the result of the Committee's view that performance against goals and for shareholders was solid, near expectations, but was not at the exceptional and transformational level achieved in the year prior.

Relationship between Company Performance and Executive Pay

The biotechnology industry is generally thought to be characterized by a higher risk profile and by more potentially binary business outcomes than more established industries, which historically has led to high stock volatility for biotechnology companies.

The value of equity in the Summary Compensation Table is inflated by options with a higher exercise price in December 2020 that are currently above market price and do not provide any immediate in-the-money value to the executives at the current stock price. And, the contingent options granted in December 2021, which are not in the Summary Compensation Table because they are contingent on stockholder approval, also have an exercise price that is above market price and provide no value as a result of their \$34.57 exercise price. This is an outcome that we view as naturally aligning pay and performance, and that is misleading to shareholders because the underwater options with a high exercise price reflect the majority of disclosed executive compensation value as a result of the manner in which they are reported using the Black Scholes option pricing model.

Executive Compensation Practices

Below we provide a summary of our executive compensation practices, including both the practices that we follow and those that we do not follow, in each case based on whether we believe they serve the long-term interests of our stockholders.

Core Compensation Principles and Practices

- Pay-for-Performance. A substantial majority of the compensation awarded to our NEOs is either tied to specific company-wide goals or have been made in the form of stock option awards that will only have value if the price of our stock increases after the grant date. There were no full value equity awards that guarantee value if the stock price does not increase, also known as restricted share or restricted stock units, granted to NEOs in 2021.
- Periodic Peer Group Review. The compensation committee periodically reviews the Company's compensation peer group. This review occurred most recently in May 2020.
- b Double Trigger. Our severance policy (the "Severance Policy") only provides our executive officers with acceleration of unvested equity awards held by them if they are terminated (without cause or constructively) in connection with a change of control transaction or within 18 months following a change of control transaction. We do not provide accelerated vesting of equity awards on a change in control alone.
- b *Modest Perquisites.* We provide only modest perquisites and nearly all of those perquisites are in the form of insurance benefits that we believe are in line with industry practice for executive compensation. We do not provide perquisites such as personal travel reimbursement, tax services or financial planning.
- P Reasonable Post-Employment and Change of Control Severance Arrangements. We believe that our severance arrangements with our executive officers are reasonable and in line with industry practice.
- P Regular Review of Share Utilization for Equity Compensation. We regularly evaluate equity incentive plan share reserve pool utilization by reviewing overhang levels (the dilutive impact of equity compensation on stockholders) and annual run rates (the aggregate shares awarded as a percentage of total outstanding shares).
- b *Mitigate Undue Risk.* We have designed our executive compensation program to mitigate undue risk associated with compensation by, among other things, awarding a substantial portion of executive compensation in the form of long-term compensation with multi-year vesting (i.e. stock options with multi-year vesting requirements).
- b *Utilize Independent Compensation Consulting Firm.* The compensation committee regularly consults with an independent compensation consulting firm which provides no other services to the Company. For more information on our independent compensation consultant, please see Board Meetings and Committees—Compensation Committee" above.
- x *No Stock Option Repricing.* Our equity incentive plans prohibit us from repricing, exchanging or otherwise providing value for underwater stock options.
- x *No Inclusion of the Value of Equity Awards in Severance Calculations.* Our post-termination and change of control severance arrangements do not include the value of equity awards in annual compensation for purposes of determining cash severance amounts.
- x *No Fixed Employment Terms or Guaranteed Future Compensation.* We do not have employment contracts with our executive officers that provide guaranteed terms of employment or guaranteed future compensation levels.
- x No Funded Pension or Retirement Plans. We do not provide any guaranteed or funded retirement plan benefits.

x *No Hedging Transactions, Share Pledging, or Short Sales by Employees or Directors.* Our insider trading policy prohibits any employee or director from engaging in hedging transactions, short sales or trading in any derivative security of the Company. This policy also prohibits pledging our shares on margin.

Role of Stockholder Say-on-Pay Votes

We provide our stockholders with the opportunity periodically to cast an advisory vote on our executive compensation program (referred to as a "say-onpay vote"). At our annual meeting of stockholders held in October 2019, approximately 99% of the votes cast on the say-on-pay proposal were voted in favor of the proposal, and a majority of stockholders present at the meeting selected "Three Years" for their preference as to how frequently we should seek future advisory votes on the compensation of our named executive officers. As a result, we will be seeking an advisory say-on-pay vote at this year's annual meeting of stockholders. After considering the 2019 say-on-pay vote, the compensation committee reaffirmed the design and elements of our executive compensation program and did not make any changes to our executive compensation program. The board of directors and compensation committee will continue to consider the outcome of our say-on-pay proposals and direct stockholder feedback when making future compensation decisions for the NEOs.

Design and Elements of Our Compensation Program

The material elements of our current executive compensation programs for NEOs consist primarily of the following:

- 1. Base Salary. Each NEO earned an annual base salary during 2021.
- 2. *Short-Term Incentive Compensation*. Each NEO was eligible to earn an incentive cash compensation payment for the 2021 performance period based on qualitative assessment of the Company's progress against its corporate goals and his individual performance and/or contribution to such progress.
- 3. *Long-Term Incentive Compensation*. Each NEO was awarded a stock option grant during 2021, subject to a time-based vesting schedule and contingent on stockholder approval of the amendment to the Amended and Restated 2019 Omnibus Equity Incentive Plan in this proxy statement.

We review peer group company data regarding the mix of current and long-term incentive compensation and between cash and non-cash compensation, though we have not adopted any formal policies or guidelines for allocations among these various compensation elements. However, consistent with our pay for performance philosophy, we believe that a greater component of overall direct compensation for the NEOs relative to other employees should be performance-based.

Use of Peer Company Data

We periodically review the compensation practices of our peer group companies identified below in response to the fast-moving nature of the biotechnology industry, including merger and acquisition activity, and changes in product pipeline and business stage. In determining the appropriate peer companies, we consider the following factors: geographical region, company stage of development, company size and market capitalization.

As a result of the Company having a combination of multiple drug candidates in diverse therapeutic areas, a mix of wholly-owned and partnered drug candidates, and a technology platform with the potential to enable multiple drug candidates in future years, it is very challenging to identify truly comparable companies.

The peers from which benchmark compensation information was reviewed were of similar size and commercial stage. The 2021 compensation decisions used data from a 2020 study of similar companies with median 2019 average market cap that was near our 2021 market cap size. The peer company data was derived from proxy statements for the 2020 calendar year that disclosed 2019 compensation decisions. Most peer companies reviewed in 2019 were pre-commercial RNA companies and/or companies focused on drug discovery for oncology or rare diseases.

The compensation committee determined the composition of our peer group, with the assistance of its outside compensation consultant. At the time the peer group decisions were made in May 2020, our market capitalization was approximately \$1.13 billion, which placed our size slightly above the median of the peer group, which was \$932 million on average during 2019 (the period reflected by their compensation disclosures available during 2020). This was viewed as reasonable because we were not comparing ourselves to generally larger companies. The peer data from 2020 were reviewed again for context by the Committee in October 2021 and our market cap at the time was ~\$1.1 billion, so the peer data were viewed as remaining valid for another year of decisions (and, once again, our market capitalization size was larger than the median peer). The peer group of companies reviewed as context when determining 2021 compensation decisions consisted of the following companies:



AnaptysBio, Inc. Arena Pharmaceuticals, Inc. Arrowhead Pharmaceuticals, Inc. Cytokinetics, Inc. Dicerna Pharmaceuticals, Inc. Editas Medicine Inc Epizme, Inc. Fate Therapeutics, Inc. Geron Corporation Heron Therapeutics, Inc. Inovio Pharmaceuticals, Inc. Intellia Therapeutics, Inc. Kura Oncology, Inc. Mirati Therapeutics, Inc. Odonate Therapeutics, Inc. RegenXBio Inc. Travere Therapeutics, Inc. (formerly Retrophin) Sangamo Therapeutics, Inc. Sorrento Therapeutics, Inc. Viking Therapeutics, Inc. Wave Life Sciences Ltd.

Although we reviewed and discussed the compensation data for the peer group companies to help inform executive compensation decisions, we do not set compensation at any specific level or percentile based solely on the peer group data. The peer group data is used by us as only one reference point taken into account in making compensation decisions. We do not use peer group or industry survey data as a standalone tool for setting compensation due to the unique aspects of our business and the need to attract and retain particular highly qualified executives with unique experience, skills and other individual facts and circumstances. However, we generally believe that reviewing and analyzing this information is an important component of our executive compensation decision-making process.

Base Salary

Base salary is the initial building block of compensation for the NEOs because it provides the executives with a specified minimum level of cash compensation, which we believe is important to attract and retain executives. We determine base salary by considering competitive pay practices, cost of labor and compensation trends, individual performance and promotions, level and scope of responsibility, experience and internal pay equity. However, we do not use a formula or assign a particular weight to any one factor. Rather, the determination of base salary levels is subjective, and we set base salaries that we believe are reasonably competitive and may also reflect performance in the prior year.

The 2021 salary decisions were made in late 2020 when our stock price performance was among the best of any publicly traded company in the US and our market cap was over almost 3 times higher than at the end of 2021. Salary increases reflected the high performance and rapid maturation of the Company. Nevertheless, the salary of our CEO remained below the median of similar officers in the peer group. The base salary earned by each NEO during 2021 is reported below in the Summary Compensation Table.

Base salary increases in late 2020 for 2021 were as follows:

Name and Principal Position	2020 Salary (\$)	2021 Salary (\$)	Increase (\$)	Increase (%)
Joseph E. Payne				
President and Chief Executive Officer, Director	500,000	600,000	100,000	20%
Dr. Padmanabh Chivukula				
Chief Scientific Officer, Chief Operating Officer	400,000	500,000	100,000	25%
Andy Sassine				
Chief Financial Officer	400,000	500,000	100,000	25%
Dr. Steven Hughes				
Former Chief Medical Officer ⁽¹⁾	415,000	460,000	45,000	11%
Lance Kurata				
Chief Legal Officer ⁽²⁾	375,000	400,000	25,000	7%
	39			

(1) Effective February 14, 2022, Dr. Hughes stepped down from his position with the Company, and currently supports the Company and its programs in the role of Strategic Clinical Advisor. He ceased to be a NEO of the Company at such time.

(2) Mr. Kurata's employment as Chief Legal Officer commenced on August 10, 2020. The amount set forth as base salary for 2020 does not reflect amounts actually paid as compensation. For more information, see "Executive Compensation."

In December 2021, we reviewed the base salaries of the NEOs and increased them by 5% to 8%.

Short-Term Incentive Compensation

Incentive Compensation Policy. We believe that our short-term incentive compensation program ("Incentive Compensation Policy") for the NEOs rewards the achievement of important short-term objectives that advance us toward our long-term strategic objectives. Our Incentive Compensation Policy applies to all executive officers. Consistent with our compensation philosophy of paying for performance and maintaining a flexible approach, we use the Incentive Compensation Policy to incentivize the NEOs to achieve important corporate goals while at the same time encouraging and rewarding excellent individual performance by recognizing and rewarding differences in performance between individual executives.

Plan Design. The board of directors establishes a small number of important annual corporate goals each year that include clinical development, research, manufacturing, organizational and financial goals which we believe are essential to building long-term stockholder value and are used to assess annual corporate performance. The corporate objectives are not weighted formally nor were they formally tied to a cash bonus plan in 2021. At the end of 2021, the progress against the corporate objectives and against unexpected areas of opportunity, specifically the progress toward development of a vaccine for COVID-19, were considered when determining executive bonuses. rate performance rating.

After 2021 corporate performance was determined, the individual performance and future contribution of NEOs was reviewed by the compensation committee in consultation with Mr. Payne (other than his own performance). Mr. Payne's individual performance is separately reviewed by the compensation committee.

Target Annual Short-Term Incentive Compensation for 2021. The NEOs were each assigned a target annual incentive for 2021 ranging from 40% to 60% of base salary. The table below shows the target annual incentive assigned by us to each NEO for 2021 both as a dollar amount and as a percentage of base salary.

	Target Annual Incentive for 2021	Target Annual Incentive for 2021 (% of Base
Name	(\$)	Salary)
Joseph E. Payne	360,000	60%
Dr. Padmanabh Chivukula	250,000	50%
Andy Sassine	250,000	50%
Dr. Steven Hughes (1)	184,000	40%
Lance Kurata	160,000	40%

(1) Effective February 14, 2022, Dr. Hughes stepped down from his position with the Company, and currently supports the Company and its programs in the role of Strategic Clinical Advisor.



Company Performance Objectives.

In addition to the corporate performance objectives initially agreed-upon at the beginning of the calendar year 2021 set forth below, as previously disclosed, trial results for ARCT-154, the Company's lead, next-generation self-amplifying mRNA COVID vaccine candidate, displayed a 14-24 fold improvement on the Company's ARCT-021 product candidate. A Phase 1/2/3 trial of ARCT-154 in Vietnam was initiated in August 2021, and has completed enrollment and priming vaccination in all portions of the study with over 19,000 participants. This outcome was not among the Company's 2021 corporate objectives but has been considered together with the original objectives and results in assessing corporate performance.

The 2021 corporate objectives and results of these objectives were as follows:

- ARCT-021 (LUNAR-COV19): Initiate Phase 2 and Phase 3 studies, receive EUA. (1)
- Publish: Publication in a high-impact peer reviewed journal.
- Non-Dilutive Financing: Receive at least \$50 million in non-dilutive financing.
- New Coverage: Obtain coverage from at least two additional analysts.
- Dilutive Financing: Receive \$200 million in dilutive financing, assuming advance of ARCT-021 and ARCT-810. (2)
- SEC Disclosure: Timely filing of all SEC reports, filings and notices.
- SOX 404: Ensure SOX 404 compliance.
- Clinical Operations: Build out key functions for all clinical operations.
- Corporate Policies: Complete gap analysis of corporate policies and implement changes following review.
- ARCT-810 (LUNAR-OTC): Initiate Phase 2 Multiple Dose Study, Biological POC. (3)
- ARCT-032 (LUNAR-CF): File CTA. (4)

(1) This objective was partially achieved due to diversion of resources to advance ARCT-154, as discussed above.

(2) This objective was abandoned as it was no longer necessary. Receipt of \$200 million in dilutive financing was not necessary to advance ARCT-154, due in large part the Company's collaboration with Vinbiocare whereby Vinbiocare sponsored and paid for the Phase 1/2/3 study of ARCT-154 in Vietnam.

(3) This objective was delayed due to patient enrollment and retention difficulties experienced as a result of the COVID-19 pandemic. Phase 2 multipledose study of ARCT-810 in OTC-deficient patients is approved to proceed by the regulatory authorities in the United Kingdom, Belgium and Spain, and clinical trial authorization applications are currently being prepared for other European countries. We anticipate that patient screenings will begin in 2022.

(4) This objective was partially achieved due to diversion of resources to advance ARCT-154 and other product candidates. Significant progress on the LUNAR-CF program was made in 2021, with identification of the development candidate that is now being evaluated in GLP toxicology studies. We anticipate filing a Clinical Trial Applications for a first in human study in 2022.

Except as otherwise indicated, these objectives were achieved.

Actual Annual Incentives Earned for 2021

The board of directors also recognized certain accomplishments directly related to management efforts including those listed above in *Company Performance Highlights*. In particular, the Committee considered the rapid progress towards development of a next-generation COVID-19 vaccine using the Company's RNA technology and completion of valuable non-dilutive funding for such efforts.



The compensation committee, in consultation with Mr. Payne, determined that the individual contributions of each NEO were critical to the Company's successful 2021 performance. As a result, bonuses for 2021 were paid to each of the NEOs, in an amount equal to 100% of each's target bonus. The amounts of each NEO's bonus for the 2021 fiscal year are reported in the Summary Compensation Table.

Long-Term Incentive Compensation: Equity Awards

Overview. In accordance with our objective of aligning executive compensation with our stockholders' interests, our current long-term incentive program for the NEOs generally consists of an annual award of equity compensation that is typically subject to a multi-year vesting schedule. We believe that equity compensation is a very effective tool to align the interests of our NEOs, who have significant responsibility for driving our success, with the interests of our stockholders. Stock options are our preferred form of long-term incentive compensation because we believe they are inherently performance-based, with value delivered only if the price of our common stock appreciates following the grant.

In 2021, the Company granted awards in December, like in 2020, and plans to maintain this annual grant schedule for a period of time. The December 2021 options, described elsewhere as the Contingent Grants in this proxy statement, were granted at a price of \$34.75; these awards are not in the Summary Compensation Table for 2021 while they remain contingent on stockholder approval of the amendment to the Amended and Restated 2019 Omnibus Equity Incentive Plan in this proxy statement).

These December 2021 options have considerably lower grant value than the awards granted in 2020. The fair value of the CEO's 2021 grant for 150,000 options was slightly below the median value in the 2021 peer data and was approximately 70% lower than CEO grant value in 2020. Further, in addition to lower grant value than 2020, the number of 2021 CEO stock options awards was reduced by 45% compared to 2020. The reduction in the number of options provided to the CEO and the other ongoing NEOs in 2021 reflects the fact that 2020 was viewed as a transformational year of exceptionally high performance and 2021 performance was viewed as solid but not at the same rare level as 2020 performance.

We refer to these December 2021 stock option awards elsewhere in this proxy statement as the "Contingent Grants" as the issuance of awards is subject to shareholder approval of Proposal No. 3 as set forth in this proxy statement. Awards of Contingent Grants in December 2021 do not show value in the Summary Compensation Table in 2021 because they are subject to shareholder vote in 2022. The description of value in this document is based on the Grants of Plan Based Award Table. Further, if the Contingent Grants are approved by shareholders, then the Summary Compensation Table in the 2023 proxy will be inflated because it will include the value of the 2022 NEO equity awards and the 2021 Contingent Awards.

Actual Long-Term Incentives Awarded.

In determining the grant levels for these awards, we consider a number of factors, including an assessment of individual performance, overall corporate performance, competitive market practice, the value of unvested stock options held by the executive (i.e., the retention value), the individual's overall contributions to corporate success, and stockholder dilution. We do not use a formula or assign a particular weight to any one factor in determining equity award levels and the CEO is generally viewed as responsible for overall corporate performance. The determination of equity grant levels is subjective, and the compensation committee awards equity grants at levels it believes in its judgment are reasonably competitive and consistent with our philosophy that a substantial portion of our executives' compensation should be performance-based and help to further link the interests of our executives with those of our stockholders. 25% of the annual stock option awards vest on the first anniversary of the grant date, with the remainder vesting in equal increments on each successive one-month anniversary thereafter for the next 36 months. This provides a retention incentive for the executive as well as an additional incentive to help create value for our stockholders. The 2021 NEO options were granted contingent on shareholder approval of the 2019 stock plan amendment in this proxy and will be forfeited if the stock plan amendment does not earn majority vote support from shareholders.



The option awards were partly determined based on the annual rate of ownership sharing with executives, with consideration of the grant value. The rates of ownership sharing were in a market range, with our CEO's December 2021 grant slightly below the median if measured as an option sharing rate as a percent of our shares outstanding at the time. The options are naturally performance-based because they require an increase after grant to be valuable. The December 2020 and December 2021 options are not currently in-the-money. The Company has no intentions to change the option awards so that the exercise price is lower and believes that stock price performance will dictate the outcome of the options in a manner that is aligned with the interests of stockholders.

Severance and Change of Control Benefits

If the employment of an NEO is terminated by us without cause or by the NEO for a designated good reason outside of the context of a change of control transaction, the NEO would be entitled to severance benefits under his employment agreement with the Company. These severance benefits include a cash severance payment based on the NEO's then-current base salary and a pro rata amount of his annual incentive bonus, and payment of COBRA premiums. In order to attract and retain these NEOs in a competitive environment for highly skilled senior executive talent in the biotechnology and pharmaceutical industry and to provide an incentive to obtain a broad release of claims in favor of the Company, we determined it was beneficial to offer each of them severance protection in the case of a termination without cause or constructive termination outside the context of a change of control transaction. These NEOs would also be entitled to certain termination benefits upon a termination of employment because of death or disability.

In April 2021, after consulting with the compensation committee's independent compensation consultant, the Board adopted a written Severance Policy covering all senior executives of the Company. Termination and change of control payments under the Severance Policy are without duplication of any severance payments provided for in an individual employment agreement (such that the higher amount would apply). The primary changes effected by the Severance Policy are to (i) implement new and more internally equitable amounts for cash severance, (ii) make certain clean-up changes to the severance provisions in the NEOs' employment agreements (the "Employment Agreements"), and (iii) require non-solicitation and non-disparagement restrictive covenants as a condition of receiving severance. The Severance Policy became effective May 1, 2021.

Pursuant to the Severance Policy, the NEOs are entitled to certain severance benefits if their employment is terminated in connection with a change of control. Severance benefits under the Severance Policy are structured on a "double-trigger" basis, meaning that the executive must experience a termination without cause or resign for a specifically defined good reason in connection with the change of control in order for severance benefits to become payable under the Severance Policy. Like the severance benefits under the Employment Agreements, we believe that these change of control severance benefits are an important element of a competitive total compensation program. Additionally, we believe that providing change of control benefits should eliminate, or at least reduce, any reluctance of our NEOs and other key employees covered by the Severance Policy to diligently consider and pursue potential change of control opportunities that may be in the best interests of our stockholders. At the same time, by providing change of control benefits only upon the occurrence of an additional triggering event occurring in connection with the change of control transaction resulting in a job loss, we believe that this Severance Policy helps preserve the value of our key personnel for any potential acquiror.

Under the Severance Policy, the executive would be entitled to accelerated equity award vesting if their employment is terminated within 18 months of a change of control. The other severance benefits under the Severance Policy are generally similar to the severance benefits described above, provided that (i) the executive is also entitled to a lump sum payment in an amount equal to his target annual bonus for the year of termination, (ii) pro-rata target bonus for the year of termination, and (iii) Company-paid COBRA coverage is extended by several additional months.

The "Potential Payments Upon Termination or Change of Control" section below describes and quantifies the severance and other benefits potentially payable to the NEOs.

Other Benefits

We believe that establishing competitive benefit packages for employees is an important factor in attracting and retaining highly-qualified personnel, including the NEOs. The NEOs are eligible to participate in all of our employee benefit plans, such as medical, dental, vision, group life, disability insurance, commuting benefits, employee stock purchase plan and the 401(k) plan, in each case generally on the same basis as other employees. We do not offer a tax-qualified defined-benefit pension plan or any non-qualified defined benefit retirement plans, nor do we provide material perquisites to our executives.



Section 162(m) Policy

Generally, Section 162(m) of the Code ("Section 162(m)") disallows a federal income tax deduction for public corporations of remuneration in excess of \$1 million paid in any fiscal year to certain specified executive officers. For taxable years beginning before January 1, 2018 (i) these executive officers consisted of a public corporation's chief executive officer and up to three other executive officers (other than the chief financial officer) whose compensation is required to be disclosed to stockholders under the Exchange Act because they are our most highly-compensated executive officers and (ii) qualifying "performance-based compensation" was not subject to this deduction limit if specified requirements are met.

Pursuant to the Tax Cuts and Jobs Act of 2017, which was signed into law on December 22, 2017 (the "Tax Act"), the remuneration of a public corporation's chief financial officer is also subject to the deduction limit. In addition, subject to certain transition rules (which apply to remuneration provided pursuant to written binding contracts which were in effect on November 2, 2017 and which are not subsequently modified in any material respect), for taxable years beginning after December 31, 2017, the exemption from the deduction limit for "performance-based compensation" is no longer available. In addition, under the Tax Act, once an executive becomes a "covered employee" under Section 162(m), the individual will continue to be a "covered employee" as long as he or she remains employed by the company. Consequently, all remuneration in excess of \$1 million paid to a covered executive will not be deductible unless it qualifies for transitional relief applicable to certain binding, written performance-based compensation arrangements that were in place as November 2, 2017 or transitional relief for applicable to certain newly public companies. These changes will cause more of our compensation to be non-deductible under Section 162(m) and will eliminate the Company's ability to structure performance-based awards to be exempt from Section 162(m).

In designing our executive compensation program and determining the compensation of our executive officers, including our named executive officers, the compensation committee considers a variety of factors, including the potential impact of the Section 162(m) deduction limit. While the compensation committee is mindful of the benefit of the full deductibility of compensation, it believes that we should not be constrained by the requirements of Section 162(m) where those requirements would impair our flexibility in compensating our executive officers in a manner that can best promote our corporate objectives. Therefore, the compensation committee has not adopted a policy that would require that all compensation be deductible, though it does consider the deductibility of compensation decisions. The compensation committee may authorize compensation payments that are not fully tax deductible if it believes that such payments are appropriate to attract and retain executive talent or meet other business objectives.

Processes and Procedures for Executive Compensation

Our compensation committee assists the Board in discharging its responsibilities relating to oversight of the compensation of our chief executive officer and our other executive officers, including reviewing and making recommendations to our Board with respect to the compensation, plans, policies and programs for our chief executive officer and our other executive officers and administering our equity compensation plans for our executive officers and employees.

Our compensation committee annually reviews the compensation, plans, policies and programs for our chief executive officer and our other executive officers. In connection therewith, our compensation committee considers, among other things, each executive officer's performance in light of established individual and corporate goals and objectives and the recommendations of our chief executive officer. In particular, our compensation committee considers the recommendations of our chief executive officer when reviewing base salary and incentive performance compensation levels of our executive officers and when setting specific individual and corporate performance targets under our annual executive incentive bonus plan for our executive officers. Our chief executive officer has no input and is not present during voting or deliberations about his compensation. Our compensation committee may delegate its authority to a subcommittee, but it may not delegate any power or authority required by agreement, law, regulation or listing standard to be exercised by the compensation committee as a whole.



Our nominating and corporate governance committee has authority to review and recommend to the Board compensation programs for our outside directors, although this role has been predominantly undertaken by our compensation committee, in consultation with members of our full Board. Management generally does not have a role in the setting of director compensation. Our nominating and corporate governance committee may delegate its authority to a subcommittee, but it may not delegate any power or authority required by agreement, law, regulation or listing standard to be exercised by the nominating and corporate governance committee as a whole.

Summary Compensation Table

Our named executive officers ("NEOs") for the year ended December 31, 2021, which consist of all individuals who served as our principal executive officer and principal financial officer during 2021 and our three other most highly compensated executive officers who were serving as executive officers at the end of the last completed fiscal year, are Joseph E. Payne, our President and Chief Executive Officer; Dr. Padmanabh Chivukula, our Chief Scientific Officer and Chief Operating Officer; Andy Sassine, our Chief Financial Officer; Dr. Steven Hughes, our former Chief Medical Officer and Lance Kurata, our Chief Legal Officer.

Name and Principal Position	Year	Salary (\$)	Bonus (\$) ⁽¹⁾	Option Awards (\$) ⁽²⁾	All Other Compensation (\$)	Total (\$)
Joseph E. Payne	2021	600,000	360,000			960,000
President and Chief Executive Officer, Director	2020	500,000	450,000	11,911,500	_	12,861,500
	2019	450,000	243,000	472,818	_	1,165,818
Dr. Padmanabh Chivukula	2021	500,000	250,000		—	750,000
Chief Scientific Officer, Chief Operating Officer	2020	400,000	240,000	6,832,600	—	7,472,600
	2019	370,000	133,200	132,956	_	636,156
Andy Sassine,	2021	500,000	250,000		—	750,000
Chief Financial Officer	2020	400,000	240,000	7,014,800	—	7,654,800
	2019	375,000	150,000	801,880	—	1,326,880
Dr. Steven Hughes	2021	460,000	184,000	—	—	644,000
Former Chief Medical Officer ⁽³⁾	2020	415,000	249,000	4,212,625	_	4,876,625
· · · · ·	2019	299,873	249,000	_	_	299,873
Lance Kurata	2021	400,000	160,000	_	_	560,000
Chief Legal Officer ⁽⁴⁾	2020	156,250	67,500	4,916,800		5,140,550
			,	.,,0		,,

(1) Bonuses in this column represent discretionary cash bonuses approved by the Board and/or compensation committee of the Board.

(2) Amounts shown in this column do not reflect actual compensation received by the named executive officers and the actual economic value that may be realized by the applicable NEO. Includes the value of stock options determined using the grant date fair value computed in accordance with FASB ASC 718. See Note 9 to the consolidated financial statements of the Company for the fiscal years ended December 31, 2020 and December 31, 2021 in the Form 10-K filed by the Company on March 1, 2022, for additional description of the assumptions used in the valuation. On December 10, 2021, based on a review of the 2021 milestones for the Company and each of the NEOs, Mr. Payne, Mr. Sassine, Dr. Chivukula and Mr. Kurata received Contingent Grants representing options to purchase 150,000, 85,000 and 50,000 shares of our common stock, respectively, with an exercise price of \$34.57 per share, contingent to approval of the Amendment by our stockholders at the Annual Meeting. If approved then twenty-five percent of each option will vest on the first anniversary of the grant date, with the remainder vesting in equal increments on each successive one-month anniversary thereafter for the next thirty-six months. Contingent Grants awarded to Dr. Hughes at this time were cancelled in their entirety upon Dr. Hughes's resignation from his position of Chief Medical Officer as set forth below and elsewhere in this proxy statement.

(3) Effective February 14, 2022, Dr. Hughes stepped down from his position with the Company, and currently supports the Company and its programs in the role of Strategic Clinical Advisor. He ceased to be a NEO of the Company at such time.

(4) Mr. Kurata's employment as Chief Legal Officer commenced on August 10, 2020.

2021 GRANTS OF PLAN-BASED AWARDS

The following table provides certain information regarding the Contingent Grants which represent equity awards granted to our named executive officers during the fiscal year ended December 31, 2021, which remain subject to stockholder approval of Proposal Number 3 herein. These equity awards were granted under the Amended and Restated 2019 Omnibus Equity Incentive Plan.

Name	Grant Date	All Other Option Awards: Number of Securities Underlying Options	Exercise Price of Option Awards	Grant Date Fair Value of Option Awards (\$) ⁽¹⁾
Joseph Payne	December 10, 2021	(#) 150,000	(\$) 	(\$)
Dr. Padmanabh Chivukula	December 10, 2021	85,000	34.57	_
Andy Sassine	December 10, 2021	85,000	34.57	_
Dr. Steven Hughes (2)	December 10, 2021	75,000	34.57	
Lance Kurata	December 10, 2021	50,000	34.57	—

(1) Represents the grant date fair value of option awards granted during the fiscal year ended December 31, 2021, calculated in accordance with FASB ASC Topic 718. Awards are subject to shareholder approval and therefore no grant date has been established.

(2) Effective February 14, 2022, Dr. Hughes stepped down from his position with the Company, and currently supports the Company and its programs in the role of Strategic Clinical Advisor.

2021 OPTION EXERCISES AND STOCK VESTED

None of the NEOs exercised any options during the fiscal year ended December 31, 2021. None of the NEOs held any restricted stock awards during the fiscal year ended December 31, 2021.

Current Agreements With Our Named Executive Officers

The termination and change of control payments provided for under the employment agreements summarized below are without duplication of any severance payments provided for under the Company's Severance Policy (such that the higher amount would apply). For a summary of the Severance Policy, see pages 43 and 44. Effective February 14, 2022, Dr. Hughes stepped down from his position as Chief Medical Officer of the Company and his executive employment agreement terminated on such date. The annual base salary amounts and performance bonus targets provided for under the employment agreements, summarized below, are subject to increase upon approval by the compensation committee of the Board as described elsewhere in this proxy statement. See "Base Salary" and "Short-Term Incentive Compensation."

Joseph E. Payne

On June 13, 2019, we entered into an Employment Agreement (the "Payne Agreement") with Joseph E. Payne, our President and Chief Executive Officer. The Payne Agreement provides for the following compensation and benefits to Mr. Payne:

- An annual base salary of \$450,000, paid in bi-monthly installments.
- An annual bonus of up to 60% of annual base salary. The bonus will be subject to the achievement of certain criteria, as determined by our Board and compensation committee.
- Reimbursement of travel and other expenses incurred by Mr. Payne in connection with his service as President and Chief Executive Officer.
- For termination without cause or resignation for good reason unrelated to change in control of, Mr. Payne will be entitled to receive (i) severance pay in the form of continuation of payment installments of Mr. Payne's final base salary for 12 months, (ii) a pro rata portion of his annual bonus (as calculated by the compensation committee and Board at the end of the bonus period and paid in a lump sum when annual bonuses are paid to other executive officers), and (iii) payment of certain health insurance coverage premiums (COBRA) for up to 18 months following his termination of employment.
- For termination without cause or resignation for good reason in connection with a change in control us, Mr. Payne will be entitled to receive a lump sum severance payment equal to (i) one year's annual base salary, (ii) an amount equal to his target annual bonus for the year of termination and (iii) an amount equal to a pro rata portion of his target annual bonus for the year of termination. Mr. Payne will also be entitled to payment of certain health insurance coverage premiums (COBRA) for up to 18 months following termination. In addition, Mr. Payne's unvested option awards and any other unvested time-based vesting equity awards then held by him will accelerate and become immediately vested and exercisable, if applicable, and no longer subject to repurchase, if applicable, upon such termination and will remain exercisable, if applicable, following Mr. Payne's termination as set forth in the applicable equity award.



Andy Sassine

On June 13, 2019, we entered into an Employment Agreement (the "Sassine Agreement") with Andy Sassine, our Chief Financial Officer. The Sassine Agreement provides for the following compensation and benefits to Mr. Sassine:

- An annual base salary of \$375,000, paid in bi-monthly installments.
- An annual bonus of up to 40% of annual base salary. The bonus will be subject to the achievement of certain criteria, as determined by our Board and compensation committee.
- Reimbursement of travel and other expenses incurred by Mr. Sassine in connection with his service as Chief Financial Officer.
- For termination without cause or resignation for good reason unrelated to change in control of us, Mr. Sassine will be entitled to receive (i) severance pay in the form of continuation of payment installments of Mr. Sassine's final base salary for 9 months, (ii) a pro rata portion of his annual bonus (as calculated by the compensation committee and Board at the end of the bonus period and paid in a lump sum when annual bonuses are paid to other executive officers), and (iii) payment of certain health insurance coverage premiums (COBRA) for up to 9 months following his termination of employment.
- For termination without cause or resignation for good reason in connection with a change in control of us, Mr. Sassine will be entitled to receive a lump sum severance payment equal to (i) one year's annual base salary, (ii) an amount equal to his target annual bonus for the year of termination and (iii) an amount equal to a pro rata portion of his target annual bonus for the year of termination. Mr. Sassine will also be entitled to payment of certain health insurance coverage premiums (COBRA) for up to 12 months following termination. In addition, Mr. Sassine's unvested option awards and any other unvested time-based vesting equity awards then held by him will accelerate and become immediately vested and exercisable, if applicable, and no longer subject to repurchase, if applicable, upon such termination and will remain exercisable, if applicable, following Mr. Sassine's termination as set forth in the applicable equity award.

Dr. Padmanabh Chivukula

On June 13, 2019, we entered into an Employment Agreement (the "Chivukula Agreement") with Dr. Padmanabh Chivukula, our Chief Scientific Officer and Chief Operating Officer. The Chivukula Agreement provides for the following compensation and benefits to Dr. Chivukula:

- An annual base salary of \$370,000, paid in bi-monthly installments.
- An annual bonus of up to 40% of annual base salary. The bonus will be subject to the achievement of certain criteria, as determined by the Board and compensation committee.
- Reimbursement of travel and other expenses incurred by Dr. Chivukula in connection with his service as Chief Scientific Officer and Chief Operating Officer.
- For termination without cause or resignation for good reason unrelated to change in control of us, Dr. Chivukula will be entitled to receive (i) severance pay in the form of continuation of payment installments of Dr. Chivukula's final base salary for 12 months, (ii) a pro rata portion of his annual bonus (as calculated by the compensation committee and Board at the end of the bonus period and paid in a lump sum when annual bonuses are paid to other executive officers), and (iii) payment of certain health insurance coverage premiums (COBRA) for up to 18 months following his termination of employment.

• For termination without cause or resignation for good reason in connection with a change in control of us, Dr. Chivukula will be entitled to receive a lump sum severance payment equal to (i) one year's annual base salary, (ii) an amount equal to his target annual bonus for the year of termination and (iii) an amount equal to a pro rata portion of his target annual bonus for the year of termination. Dr. Chivukula will also be entitled to payment of certain health insurance coverage premiums (COBRA) for up to eighteen (18) months following termination. In addition, Dr. Chivukula's unvested option award and any other unvested time-based vesting equity awards then held by him will accelerate and become immediately vested and exercisable, if applicable, and no longer subject to repurchase, if applicable, upon such termination and will remain exercisable, if applicable, following Dr. Chivukula's termination as set forth in the applicable equity award.

Lance Kurata

On July 10, 2020, we entered into an Employment Agreement (the "Kurata Agreement") with Lance Kurata, our Chief Legal Officer. The Kurata Agreement provides for the following compensation and benefits to Mr. Kurata:

- An annual base salary of \$375,000, paid in bi-monthly installments.
- An annual bonus of up to 40% of annual base salary. The bonus will be subject to the achievement of certain criteria, as determined by the Board and compensation committee.
- Reimbursement of travel and other expenses incurred by Mr. Kurata in connection with his service as Chief Legal Officer.
- For termination without cause or resignation for good reason unrelated to change in control of us, Mr. Kurata will be entitled to receive (i) severance pay in the form of continuation of payment installments of Mr. Kurata final base salary for 9 months, (ii) a pro rata portion of his annual bonus (as calculated by the compensation committee and Board at the end of the bonus period and paid in a lump sum when annual bonuses are paid to other executive officers), and (iii) payment of certain health insurance coverage premiums (COBRA) for up to 9 months following his termination of employment.
- For termination without cause or resignation for good reason in connection with a change in control of us, Mr. Kurata will be entitled to receive a lump sum severance payment equal to (i) nine months' annual base salary, (ii) an amount equal to his target annual bonus for the year of termination and (iii) an amount equal to a pro rata portion of his target annual bonus for the year of termination. Mr. Kurata will also be entitled to payment of certain health insurance coverage premiums (COBRA) for up to nine (9) months following termination. In addition, Mr. Kurata's unvested option award and any other unvested time-based vesting equity awards then held by him will accelerate and become immediately vested and exercisable, if applicable, and no longer subject to repurchase, if applicable, upon such termination and will remain exercisable, if applicable, following Mr. Kurata's termination as set forth in the applicable equity award.

POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE IN CONTROL

See "*Current Agreements With Our Named Executive Officers*" for a description of the circumstances that would trigger payments or the provision of other benefits to each of our named executive officers in connection with their termination without cause or resignation for good reason in connection with a change in control. See page 43 for details on the amounts of such payments.

Under the employment agreements with our named executive officers, "good reason" constitutes a resignation from employment with the Company in connection with the occurrence of any of the following without the executive's prior written consent: (i) a material reduction in the executive's base salary, unless pursuant to a salary reduction program applicable generally to the Company's senior executives; (ii) a material reduction in the executive's duties (including responsibilities and/or authorities), provided that (A) a change in job position (including a change in title) shall not be deemed a "material reduction" in and of itself unless the executive's new duties are materially reduced from the prior duties, and (B) a reduction in duties which results from the hiring of an individual not previously employed by the Company to serve as its President and/or Chief Executive Officer shall not be deemed a "material reduction" (e.g., where an executive undertakes temporary additional responsibilities until a President and/or Chief Executive Officer is appointed); or (iii) relocation of the executive's principal place of employment to a place that increases the executive's one-way commute by more than 50 miles as compared to the executive's then-current principal place of employment immediately prior to such relocation.

In order for an executive to resign for good reason, each of the following requirements must be met: (i) the executive must provide written notice to the Board within 30 days after the first occurrence of the event giving rise to good reason setting forth the basis for the executive's resignation, (ii) the executive must allow the Company at least 30 days from receipt of such written notice to cure such event, (iii) such event is not reasonably cured by the Company within such 30 day period (the "Cure Period"), and (iv) the executive must resign from all positions the executive then holds with the Company not later than 30 days after the expiration of the Cure Period.

Effective May 1, 2021, the Board adopted a written Severance Policy covering all senior executives of the Company. Termination and change of control payments under the Severance Policy will not duplicate any severance payments provided for in an individual employment agreement (such that the higher amount would apply). For a summary of the Severance Policy, see "Severance and Change of Control Benefits." Pursuant to the Severance Policy, in order to receive any payments upon a termination or change of control, our named executive officers must execute a general release of all known and unknown claims, as drafted in the Company's discretion, in a severance agreement acceptable to the Company within the applicable deadline set forth therein, but in no event later than twenty-one days following the executive's termination date, and permit the release to become effective and irrevocable in accordance with its terms.

Options granted to our officers and certain of our directors may contain acceleration provisions upon certain merger, acquisition, or change of control transactions. If the relationship between us and an executive officer or a director is terminated, except for cause (as defined in the various option plan agreements), options that are vested will generally remain exercisable for ninety days or thirty-six months after such termination depending on whether the options were granted to an executive officer or director.

TERMINATION AND CHANGE OF CONTROL POTENTIAL PAYMENTS AND BENEFITS TABLE

The amounts disclosed in the table below are based on the payments and benefit costs that would have been incurred by the Company if the named executive officer's employment had terminated as of the last business day of the fiscal year ended December 31, 2021. The amounts included below do not include payments and benefits to the extent they are provided on a non-discriminatory basis to salaried employees generally upon termination of employment. Where applicable, the value of one of our shares of common stock on December 31, 2021 was \$37.01, which was the closing market price of our common stock on the Nasdaq on such date.

				Change o	of Con	trol
Name	T with Re	nvoluntary ermination 10ut Cause or signation for 00d Reason (\$)	T wit Re	Involuntary Fermination hout Cause or esignation for bod Reason ⁽¹⁾ (\$)	V teri Su C	Accelerated esting upon qualifying mination or if Award ot Assumed, ubstituted or ontinued by e Acquiring Entity ⁽²⁾ (\$)
Joseph Payne ^{(4) (5)}		()		(*)		(1)
Cash Severance	\$	960,000	\$	1,320,000		
Equity Treatment		,			\$	8,987,936
Health and Welfare	\$	26,000	\$	39,000		
TOTAL	\$	986,000	\$	1,359,000	\$	8,987,936
Dr. Padmanabh Chivukula ^{(4) (5)}						
Cash Severance	\$	750,000	\$	1,000,000		
Equity Treatment					\$	5,173,315
Health and Welfare	\$	26,000	\$	39,000		
TOTAL	\$	776,000	\$	1,039,000	\$	5,173,315
Andy Sassine ⁽³⁾⁽⁵⁾						
Cash Severance	\$	625,000	\$	875,000		
Equity Treatment					\$	5,326,486
Health and Welfare	\$	20,000	\$	26,000		
TOTAL	\$	645,000	\$	901,000	\$	5,326,486
Lance Kurata ⁽³⁾⁽⁵⁾						
Cash Severance	\$	460,000	\$	620,000		
Equity Treatment					\$	3,408,825
Health and Welfare	\$	20,000	\$	20,000		
TOTAL	\$	480,000	\$	640,000	\$	3,408,825

(1) See above in "Potential Payments Upon Termination or Change in Control" for the definition of "good reason" under the employment agreements with our NEOs.

(2) Under the Severance Policy, the NEOs are entitled to accelerated equity award vesting if their employment is terminated or they resign for good reason within 18 months of a change of control.

(3) For Cash Severance, amount represents the payment of an amount equal to nine months of the employee's annual base salary, as well as (i) for involuntary termination without cause or resignation for good reason not in connection with a change of control, a lump sum payment of the pro rata portion of the executive's annual bonus for the year of termination or resignation based actual performance (a "Performance Bonus"), and (ii) for involuntary termination without cause or resignation with good reason in connection with a change of control, a Performance Bonus and a lump sum payment in an amount equal to the executive's target annual bonus for the year of termination or resignation (a "Target Bonus").

For Health and Welfare, amount represents the estimated value of providing the employee and their dependents with health benefits for nine months following the date of termination or resignation, or 12 months in connection with a change of control. This amount is calculated based on the present value of the maximum liability with respect to the employee and their dependents under our applicable benefit plan in effect as of December 31, 2021.

(4) For Cash Severance, amount represents the payment of an amount equal to 12 months of the employee's annual base salary, as well as (i) for involuntary termination without cause or resignation for good reason not in connection with a change of control, a Performance Bonus, and (ii) for involuntary termination without cause or resignation with good reason in connection with a change of control, a Performance Bonus and a Target Bonus.

For Health and Welfare, amount represents the estimated value of providing the employee and their dependents with health benefits for 12 months following the date of termination or resignation, or 18 months in connection with a change of control. This amount is calculated based on the present value of the maximum liability with respect to the employee and their dependents under our applicable benefit plan in effect as of December 31, 2021.

(5) For Equity Treatment, amount represents the estimated value of accelerated vesting of stock options subject to outstanding stock options upon a termination or resignation for good reason prior to December 31, 2021.

(6) Effective February 14, 2022, Dr. Steven Hughes stepped down from his position as Chief Medical Officer.

CEO PAY RATIO

For 2021, Mr. Payne's total annual compensation as disclosed in the Summary Compensation Table was \$960,000, and the total annual compensation for our median employee was \$406,110, resulting in a pay ratio of 2.4:1 (the "Pay Ratio").

To identify the median employee and calculate the annual total compensation of the median-paid employee, we determined (i) the total number of part-time and full-time individuals employed at any point during fiscal year 2021, and (ii) the sum of the salary, bonus, and share-based compensation incurred for each employee. Contingent Grants awarded to Mr. Payne 2021 are subject to shareholder approval as described in this proxy statement, and are not considered compensation for 2021.

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

Results

The table below shows the information used for the calculation of the ratio of the estimated annual total compensation of the median employee identified using the methodology described above to the annual total compensation of Mr. Payne as calculated for the Summary Compensation Table.

	Year	Salary (\$)	Bonus (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Joseph E. Payne	2021	600,000	360,000			960,000
Median Employee	2021	126,322	24,957	254,831	—	406,110
Ratio of Median Employee's to Mr. Payne's Annual Total C	ompensation					2.4:1

Outstanding Equity Awards at Fiscal Year-End for Fiscal 2021

The following table sets forth certain information regarding all outstanding equity awards held by our named executive officers as of December 31, 2021. None of the outstanding equity awards shown in the table below have been exercised or forfeited as of December 31, 2021. None of our named executive officers held any other equity awards from the Company as of December 31, 2021.

Number of	Number of		
		Outland	Outlan
		-	Option
			Expiration
			Date
			08/24/2028
· · · · · · · · · · · · · · · · · · ·			02/07/2029
			02/18/2030
43,750	131,250(1)		12/18/2030
<u> </u>	150,000(3)		12/10/2031
66,666	13,334(1)	8.00	08/24/2028
28,333	11,667(1)	4.99	02/07/2029
27,500	32,500(1)	14.12	02/18/2030
25,000	75,000(1)	99.29	12/18/2030
	85,000(3)	34.57	12/10/2031
36,250		8.00	08/24/2028
72,916	27,084(1)	4.53	01/01/2029
15,000	_	10.23	10/25/2029
36,666	43,334(1)	14.12	02/18/2030
25,000	75,000(1)	99.29	12/18/2030
	85,000(3)	34.57	12/10/2031
34,375	40,625(1)	14.12	02/18/2030
5,989	6,511(1)	48.84	11/11/2030
12,500	37,500(1)	99.29	12/18/2030
	75,000(3)	34.57	12/10/2031
30,000	60,000(1)	58.91	08/10/2030
	18,750(1)	99.29	12/18/2030
	50,000(3)	34.57	12/10/2031
	Securities Underlying Unexercised Options (#) Exercisable 100,000 42,500 45,833 43,750 	Securities Securities Underlying Underlying Unexercised Unexercised Options (#) Options (#) Exercisable Unexercisable 100,000 20,000(1) 42,500 17,500(1) 42,500 17,500(1) 42,500 17,500(1) 43,750 131,250(1) 150,000(3) 66,666 13,334(1) 28,333 11,667(1) 27,500 32,500(1) 27,500 75,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3) 85,000(3)	Securities Securities Underlying Underlying Unexercised Unexercised Option Options (#) Options (#) Exercise Exercisable Unexercisable Price (\$) 100,000 20,000(1) 8.00 42,500 17,500(1) 4.99 45,833 54,167(1) 14.12 43,750 131,250(1) 99.29 - 150,000(3) 34.57 66,666 13,334(1) 8.00 28,333 11,667(1) 4.99 27,500 32,500(1) 14.12 25,000 75,000(1) 99.29 - 85,000(3) 34.57 36,650 - 8.00 72,916 27,084(1) 4.53 15,000 - 10.23 36,666 43,334(1) 14.12 25,000 75,000(1) 99.29 - 85,000(3) 34.57 36,666 43,334(1) 14.12 25,000

(1) The option award vests 25% on the one-year anniversary of the date of grant, with the remainder vesting in 36 successive equal monthly increments thereafter.

(2) Dr. Steven Hughes resigned from his position as Chief Medical Officer in February 2022. Amounts reported reflect options to purchase common stock which were forfeited in connection with his resignation.

(3) On December 10, 2021 we awarded an option to each of Mr. Payne, Mr. Sassine, Dr. Chivukula and Mr. Kurata to purchase 150,000, 85,000, and 50,000 shares of our common stock, respectively, with an exercise price of \$34.57 per share, which we refer to in this proxy statement as the Contingent Grants. The Contingent Grants are subject to shareholder approval in conjunction with this proxy statement. These options will not be exercisable until stockholder approval has been obtained. See Proposal No. 3 for further discussion regarding the Amendment and the Plan.

Pension Benefits

None of our named executive officers participate in or have account balances in qualified or non-qualified defined benefit plans sponsored by us.



Non-Qualified Deferred Compensation

None of our named executive officers participate in or have account balances in qualified or non-qualified defined contribution plans or other nonqualified compensation plans sponsored by us.

Perquisites, Health, Welfare and Retirement Benefits

Our named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, vision, group life, disability and accidental death and dismemberment insurance plans, in each case on the same basis as all of our other employees. We provide a 401(k) savings plan to our employees, including our current named executive officers, as discussed in the section below entitled "401(k) Plan."

We generally do not provide perquisites or personal benefits to our named executive officers, except in limited circumstances and as noted in the Summary Compensation Table above. Our Board may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible employees, including named executive officers, with an opportunity to save for retirement on a tax advantaged basis. All participants' interests in their deferrals are 100% vested when contributed. Pre-tax and after-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participant's directions. Currently, we do not make matching contributions into the plan. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Internal Revenue Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan, and all matching contributions, if any, are deductible by us when made.

2021 Inducement Equity Incentive Plan

In October 2021, the Company adopted the 2021 Inducement Equity Incentive Plan which covered the award of up to 1,000,000 shares of common stock (the "2021 Inducement Plan") effective as of October 15, 2021. Only newly-hired employees are eligible to receive awards under the 2021 Inducement Plan. Approval of the Company's stockholders is not required as a condition to the effectiveness of the 2021 Plan for so long as the plan is in compliance with Nasdaq inducement plan rules. On October 20, 2021, the Company filed a Form S-8 with the United States Securities and Exchange Commission to register 1,000,000 awards. As of December 31, 2021, a total of 756,300 shares remained available for future issuance under the 2021 Inducement Plan, subject to the terms of the 2021 Inducement Plan. In April 2022, the number of shares available for grant under the 2021 Inducement Plan was reduced to 130,000.

Equity Compensation Plans

The following information is provided as of December 31, 2021 with respect to our equity compensation plans:

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Exe O	Weighted Average rcise Price of utstanding Options, arrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column a)
8 5	(a) 4,409,867	¢	(b) 44.98	(c) 78,840
Equity compensation plans approved by security holders	· · · · ·	\$,
Equity compensation plans not approved by security holders	243,700	\$	38.20	756,300
Total	4,653,567	\$	44.62	835,140

Compensation Committee Report

The compensation committee has reviewed and discussed the foregoing "*Executive Compensation*" section of this proxy statement, including the "*Compensation Discussion and Analysis*," with management. Based on this review and discussion, the compensation committee recommended to our Board that such information be included in this proxy statement.

Dr. Magda Marquet James Barlow Dr. Peter Farrell

The information contained in the Compensation Committee Report shall not be deemed to be soliciting material or to be filed with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, except to the extent that Arcturus specifically incorporates it by reference in such filing. Dr. Peter Farrell, former member of the compensation committee, is named here in lieu of Dr. Jing L. Marantz; the compensation committee was composed of Dr. Marquet, Mr. Barlow and Dr. Farrell at the time the information in this report was recommended to be included in this proxy statement.

RELATED PERSON TRANSACTIONS

Related Party Transactions Policy and Procedures

We have adopted a policy with respect to the review, approval, and ratification of related party transactions. Under the policy, the Audit Committee is responsible for the identification, review, consideration and approval or ratification of related person transactions. A related person includes directors, executive officers, beneficial owners of 5% or more of any class of our voting securities, immediate family members of any of the foregoing persons, and any entities in which any of the foregoing is an executive officer or is an owner of 5% or more ownership interest.

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, information regarding the related person transaction must be reviewed and approved by the audit committee

In considering related person transactions, our audit committee takes into account the relevant available facts and circumstances including, but not limited to:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- \cdot $\;$ whether the transaction was undertaken in the ordinary course of business;
- whether the transaction with the related person is proposed to be, or was, entered into on terms no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

In determining whether to approve, ratify or reject a related person transaction, the audit committee reviews all relevant information available to it about such transaction, and it may approve or ratify the related person transaction only if it determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, the best interests of the Company.

Except for the transactions described in this section, there have been no transactions during the year ended December 31, 2021 involving an amount in excess of \$120,000 to which the Company has been a participant and in which any of its directors, executive officers or holders of more than 5% of its share capital, or any members of their immediate family, had or will have a direct or indirect material interest, other than compensation arrangements which are described under "Executive Compensation" and "Director Compensation." As described under "Director Compensation," Karah Parschauer, our former non-employee director and employee of Ultragenyx, served on the Board pursuant to the terms of the Equity Agreement, which granted Ultragenyx board-nominee rights contingent on holding a threshold number of shares of our common stock. Following sales of our common stock by Ultragenyx, Ultragenyx no longer held the requisite number of shares to retain these board-nominee rights. Due to such decrease in ownership and consistent with such contractual terms, Ms. Parschauer tendered her resignation. Ms. Parschauer received no compensation other than compensation customary with her service on the Board. See "Director Compensation" for more information.

Vallon Pharmaceuticals Inc.

Arcturus Therapeutics, Inc. owns 843,750 shares of Vallon Pharmaceuticals Inc., a public clinical-stage company focused on the development and commercialization of novel abuse-deterrent medications for CNS disorders, and Mr. Payne serves on Vallon's board of directors and compensation committee. As compensation for his 2021 service on Vallon's board, Mr. Payne received options to purchase 29,286 shares of Vallon's common stock.



SECURITY OWNERSHIP

The following table sets forth information with respect to the beneficial ownership of our common stock as of April 15, 2022 by:

- each person or entity known by us to own beneficially 5% or more of our outstanding shares;
- each of our directors and executive officers individually; and
- all of our executive officers and directors as a group.

The beneficial ownership of shares of common stock is determined in accordance with the rules of the SEC and generally includes any shares of common stock over which a person exercises sole or shared voting or investment power, or the right to receive the economic benefit of ownership. For purposes of the table below, we deem shares subject to options or warrants that are currently exercisable or exercisable within 60 days of April 15, 2022, to be outstanding and to be beneficially owned by the person holding the options or warrants for the purposes of computing the percentage ownership of that person, but we do not treat them as outstanding for the purpose of computing the percentage ownership of any other person. The percentage of shares beneficially owned is based on 26,418,965 shares of common stock outstanding as of April 15, 2022.

The following table sets forth information regarding the beneficial ownership by each person or entity known to beneficially own more than 5% of our common stock as of April 15, 2022. Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares shown to be beneficially owned by them, based on information provided to us by such stockholders. Unless otherwise noted below, each beneficial owner's address is: c/o Arcturus Therapeutics Holdings Inc., 10628 Science Center Drive, San Diego, California, 92121.

Shares of Common Stock Beneficially Owned

	Common Beneficially	
5% or Greater Stockholders	Number	Percentage
Federated Hermes, Inc. ⁽¹⁾	3,694,929	14.2%
State Street Corporation ⁽²⁾	3,217,957	12.2%
ARK Investment Management LLC ⁽³⁾	2,472,630	9.4%
BlackRock, Inc. ⁽⁴⁾	1,759,590	6.7%
Sumitomo Mitsui Trust Holdings, Inc. ⁽⁵⁾	1,357,472	5.1%
Directors and Executive Officers		
Joseph E. Payne ⁽⁶⁾	1,755,826	6.6%
Andy Sassine ⁽⁷⁾	490,327	1.8%
Padmanabh Chivukula ⁽⁸⁾	771,947	2.9%
Lance Kurata ⁽⁹⁾	50,104	*
Peter C Farrell ⁽¹⁰⁾	171,815	*
Magda Marquet ⁽¹¹⁾	98,970	*
James Barlow ⁽¹²⁾	86,250	*
Edward. W. Holmes ⁽¹³⁾	63,750	*
Jing L. Marantz ⁽¹⁴⁾	8,349	*
All directors and executive officers as a group (9 persons)	3,497,338	12.7%

(1) Based on an Schedule 13G filed with the SEC on February 10, 2022. The address of Federated Hermes, Inc. is 1001 Liberty Avenue, Pittsburgh, PA 15222-3779.

(2) Based on a Form 13G/A filed with the SEC on April 11, 2022. The address of State Street Corporation is State Street Financial Center, 1 Lincoln Street, Boston, MA 02111.



- (3) Based on a Form 13G/A filed with the SEC on February 9, 2022. The address of ARK Investment Management LLC is 3 East 28th Street, 7th Floor, New York, NY 10016.
- (4) Based on a Form 13G/A filed with the SEC on February 3, 2022. The address of BlackRock, Inc. is 55 East 52nd Street New York, NY 10055.
- (5) Based on a Form 13G filed jointly with the SEC on February 4, 2022, by Sumitomo Mitsui Trust Holdings, Inc. ("SMTH") and Nikko Asset Management Co., Ltd ("NAMC"), and a Form 13G filed with the SEC on February 14, 2022 by Nikko Asset Management Americas, Inc. ("NAMA"). The address of SMTH is 1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan. The address of NAMC is Midtown Tower, 9-7-1 Akasaka, Minato-ku, Tokyo 107-6242, Japan. The address of NAMA is 605 Third Avenue, 38th Floor, New York, NY 10158.
- (6) Includes 280,729 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 174,271 shares issuable upon the exercise of options subject to vesting.
- (7) Includes 217,082 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 114,168 shares issuable upon the exercise of options subject to vesting.
- (8) Includes 177,499 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 102,501 shares issuable upon the exercise of options subject to vesting.
- (9) Includes 50,104 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 64,896 shares issuable upon the exercise of options subject to vesting.
- (10) Includes 76,250 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 1,250 shares issuable upon the exercise of options subject to vesting.
- (11) Includes 76,250 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 1,250 shares issuable upon the exercise of options subject to vesting
- (12) Includes 76,250 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 1,250 shares issuable upon the exercise of options subject to vesting
- (13) Includes 63,750 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 1,250 shares issuable upon the exercise of options subject to vesting
- (14) Includes 8,349 shares issuable upon the exercise of options exercisable within 60 days of April 15, 2022; does not include 18,350 shares issuable upon the exercise of options subject to vesting

OTHER MATTERS

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership and changes of ownership on Forms 3, 4 and 5 with the SEC. Such directors, executive officers and 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

Based solely on our review of the copies of such forms we have received and written representations from certain reporting persons that they filed all required reports, we believe that all of our officers, directors and 10% stockholders complied with all Section 16(a) filing requirements applicable to them with respect to transactions during 2021.

Fiscal Year 2021 Annual Report

Our financial statements for our fiscal year ended December 31, 2021 are included in our 2021 annual report, which we will make available to stockholders at the same time as this proxy statement. This proxy statement and our 2021 annual report are posted on our website at http://www.arcturusrx.com and at the website of the SEC at www.sec.gov. You may also obtain a copy of our 2021 annual report without charge by sending a written request to us at Arcturus Therapeutics Holdings Inc., 10628 Science Center Drive, San Diego, California 92121, Attention: Investor Relations.

Company Website

We maintain a website at http://www.arcturusrx.com. Information contained on, or that can be accessed through, our website is not intended to be incorporated by reference into this proxy statement.



PROPOSALS OF STOCKHOLDERS FOR 2023 ANNUAL MEETING

Stockholder Proposals for Inclusion in Proxy Statement

Stockholders may present proper proposals for inclusion in our proxy statement and for consideration at the next annual meeting of stockholders by submitting their proposals in writing to our corporate secretary in a timely manner. For a stockholder proposal to be considered for inclusion in our proxy statement for our next annual meeting of stockholders, our corporate secretary must receive the written proposal at our principal executive offices not later than the close of business on January 13, 2023. In addition, stockholder proposals must comply with the requirements of Rule 14a-8 under the Exchange Act regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Proposals should be addressed to:

Arcturus Therapeutics Holdings Inc. Attn: Corporate Secretary 10628 Science Center Drive San Diego, California 92121

Stockholder Proposals and Director Nominations Not for Inclusion in Proxy Statement

Our bylaws also establish an advance notice procedure for stockholders who wish to (i) present a proposal before an annual meeting of stockholders, but do not intend for the proposal to be included in our proxy statement or (ii) nominate directors for election at an annual meeting of stockholders. In order to be properly brought before our 2023 annual meeting of stockholders, the stockholder must have given timely notice of such proposal or nomination, in proper written form. To be timely for our 2023 annual meeting of stockholders, a stockholder's notice of a matter that the stockholder wishes to present, or the person or persons the stockholder wishes to nominate as a director, must be delivered to the corporate secretary at Arcturus' principal executive offices not less than 45 days and not more than 75 days prior to the first anniversary of the date of the mailing of the materials for the preceding year's annual meeting of stockholder pursuant to these provisions of our bylaws must be received by our corporate secretary at our principal executive offices:

- not earlier than February 27, 2023, and
- not later than March 29, 2023.

In the event that we hold our 2023 annual meeting of stockholders more than 30 days before or more than 30 days after the one-year anniversary date of the 2022 annual meeting, then such written notice must be received no later than the close of business on the later of the following two dates:

- the 90th day prior to such annual meeting, or
- the 10th day following the day on which public announcement of the date of such meeting is first made.

To be in proper written form, a stockholder's notice must include the specified information concerning the proposal or nominee as described in our bylaws. Notices should be addressed to:

> Arcturus Therapeutics Holdings Inc. Attn: Corporate Secretary 10628 Science Center Drive San Diego, California 92121

For additional information regarding stockholder recommendations for director candidates, please see the section entitled "Requirements for Stockholder Recommendations of a Candidate to our Board."



We know of no other matters to be submitted at the 2022 annual meeting. If any other matters properly come before the 2022 annual meeting, it is the intention of the persons named in the proxy to vote the shares they represent as the Board may recommend. Discretionary authority with respect to such other matters is granted by a properly submitted proxy.

It is important that your shares be represented at the 2022 annual meeting, regardless of the number of shares that you hold. You are, therefore, urged to vote as promptly as possible to ensure your vote is recorded.

THE BOARD OF DIRECTORS

San Diego, California May 13, 2022

ARCTURUS THERAPEUTICS HOLDINGS INC. AMENDED & RESTATED 2019 OMNIBUS EQUITY INCENTIVE PLAN (Originally Effective June 10, 2019; Amended & Restated Effective June 5, 2020; Amended [___], 2022)

ARTICLE 1. EFFECTIVE DATE, OBJECTIVES AND DURATION

1.1 Effective Date of the Plan. The Board of Directors of ARCTURUS THERAPEUTICS HOLDINGS INC., a Delaware corporation (the "Company"), originally adopted the 2019 OMNIBUS EQUITY INCENTIVE PLAN, as amended and restated to date (the "Plan") effective as of June 10, 2019. An amendment and restatement of the Plan was adopted by the Board on April 26, 2020 and became effective June 5, 2020 upon approval by the Company's stockholders. The most recent amendment of the Plan was adopted by the Board on [___] (the "Effective Date"), subject to and conditioned upon approval by the Company's stockholders.

1.2 <u>Objectives of the Plan</u>. The Plan is intended (a) to allow selected employees of and consultants to the Company and its Affiliates to acquire or increase equity ownership in the Company, thereby strengthening their commitment to the success of the Company and stimulating their efforts on behalf of the Company, and to assist the Company and its Affiliates in attracting new employees, officers and consultants and retaining existing employees and consultants, (b) to optimize the profitability and growth of the Company and its Affiliates through incentives which are consistent with the Company's goals, (d) to provide Grantees with an incentive for excellence in individual performance, (e) to promote teamwork among employees, consultants and Non-Employee Directors, and (f) to attract and retain highly qualified persons to serve as Non-Employee Directors and to promote ownership by such Non-Employee Directors of a greater proprietary interest in the Company, thereby aligning such Non-Employee Directors' interests more closely with the interests of the Company's stockholders.

1.3 <u>Duration of the Plan</u>. The Plan shall commence on the Effective Date and shall remain in effect, subject to the right of the Board to amend or terminate the Plan at any time pursuant to Article 15 hereof, until the earlier of the tenth anniversary of the Effective Date, or the date all Shares subject to the Plan shall have been purchased or acquired and the restrictions on all Restricted Shares granted under the Plan shall have lapsed, according to the Plan's provisions; provided, however, in no event may an Incentive Stock Option be granted more than ten years after the earlier of (i) the date of the most recent adoption of the Plan by the Board or (ii) the Effective Date.

ARTICLE 2. DEFINITIONS

Whenever used in the Plan, the following terms shall have the meanings set forth below:

2.1 "<u>Affiliate</u>" means any corporation or other entity, including but not limited to partnerships, limited liability companies and joint ventures, with respect to which the Company, directly or indirectly, owns as applicable (a) stock possessing more than fifty percent (50%) of the total combined voting power of all classes of stock entitled to vote, or more than fifty percent (50%) of the total value of all shares of all classes of stock of such corporation, or (b) an aggregate of more than fifty percent (50%) of the profits interest or capital interest of a non-corporate entity.

2.2 "<u>Award</u>" means Options (including non-qualified options and Incentive Stock Options), SARs, Restricted Shares, Performance Units (which may be paid in cash), Performance Shares, Deferred Stock, Restricted Stock Units, Dividend Equivalents, Bonus Shares or Other Stock-Based Awards granted under the Plan.

2.3 "<u>Award Agreement</u>" means either (a) a written agreement entered into by the Company and a Grantee setting forth the terms and provisions applicable to an Award granted under this Plan, or (b) a written statement issued by the Company to a Grantee describing the terms and provisions of such Award, including any amendment or modification thereof. The Committee may provide for the use of electronic, internet or other non-paper means for the acceptance thereof and actions thereunder by the Grantee.

2.4 "Board" means the Board of Directors of the Company.

2.5 "<u>Bonus Shares</u>" means Shares that are awarded to a Grantee with or without cost and without restrictions either in recognition of past performance (whether determined by reference to another employee benefit plan of the Company or otherwise), as an inducement to become an Eligible Person or, with the consent of the Grantee, as payment in lieu of any cash remuneration otherwise payable to the Grantee.

2.6 "Cause" means, except as otherwise defined in an Award Agreement:

(a) the commission of any act by a Grantee constituting a felony or crime of moral turpitude (or their equivalent in a non-United States jurisdiction);

(b) an act of dishonesty, fraud, intentional misrepresentation, or harassment which, as determined in good faith by the Committee, would: (i) materially adversely affect the business or the reputation of the Company or any of its Affiliates with their respective current or prospective customers, suppliers, lenders and/or other third parties with whom such entity does or might do business; or (ii) expose the Company or any of its Affiliates to a risk of civil or criminal legal damages, liabilities or penalties;

(c) any material misconduct in violation of the Company's or an Affiliate's written policies; or

(d) willful and deliberate non-performance of the Grantee's duties in connection with the business affairs of the Company or its Affiliates;

provided, *however*, that if the Grantee has a written employment or consulting agreement with the Company or any of its Affiliates or participates in any severance plan established by the Company that includes a definition of "cause," Cause shall have the meaning set forth in such employment or consulting agreement or severance plan.

2.7 "CEO" means the Chief Executive Officer of the Company.

2.8 "Change in Control" shall have the meaning set forth in Section 16.4(e).

2.9 "<u>Code</u>" means the Internal Revenue Code of 1986, as amended from time to time. References to a particular section of the Code include references to regulations and rulings thereunder and to successor provisions.

2.10 "Committee" or "Incentive Plan Committee" has the meaning set forth in Section 3.1(a).

2.11 "Compensation Committee" means the compensation committee of the Board.

2.12 "Common Stock" means the common stock, \$0.001 par value, of the Company.

2.13 "Corporate Transaction" shall have the meaning set forth in Section 4.2(b).

2.14 "Deferred Stock" means a right, granted under Article 10, to receive Shares at the end of a specified deferral period.

2.15 "<u>Disability</u>" or "<u>Disabled</u>" means, unless otherwise defined in an Award Agreement, or as otherwise determined under procedures established by the Committee for purposes of the Plan:

(a) Except as provided in (b) below, a disability within the meaning of Section 22(e)(3) of the Code; and

(b) In the case of any Award that constitutes deferred compensation within the meaning of Section 409A of the Code, a disability as defined in regulations under Code Section 409A. For purpose of Code Section 409A, a Grantee will be considered Disabled if:

(i) the Grantee 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 can be expected to last for a continuous period of not less than twelve (12) months, or

(ii) the Grantee is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve (12) months, receiving income replacement benefits for a period of not less than three (3) months under an accident and health plan covering employees of the Grantee's employer.

2.16 "<u>Dividend Equivalent</u>" means a right to receive payments equal to dividends or property, if and when paid or distributed, on a specified number of Shares.

2.17 "Effective Date" has the meaning set forth in Section 1.1.

2.18 "Eligible Person" means any individual who is an employee (including any officer) of, a non-employee consultant to, or a Non-Employee Director of, the Company or any Affiliate; provided, however, that solely with respect to the grant of an Incentive Stock Option, an Eligible Person shall be any employee (including any officer) of the Company or any Subsidiary Corporation. Notwithstanding the foregoing, an Eligible Person shall also include an individual who is expected to become an employee to, non-employee consultant of or Non-Employee Director of the Company or any Affiliate within a reasonable period of time after the grant of an Award (other than an Incentive Stock Option); provided that any Award granted to any such individual shall be automatically terminated and cancelled without consideration if the individual does not begin performing services for the Company or any Affiliate within twelve (12) months after the Grant Date. Solely for purposes of Section 5.6(b), current or former employees or nonemployee directors of, or consultants to, of an Acquired Entity who receive Substitute Awards in substitution for Acquired Entity Awards shall be considered Eligible Persons under this Plan with respect to such Substitute Awards.

2.19 "Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time. References to a particular section of the Exchange Act include references to successor provisions.

2.20 "<u>Exercise Price</u>" means (a) with respect to an Option, the price at which a Share may be purchased by a Grantee pursuant to such Option or (b) with respect to an SAR, the price established at the time an SAR is granted pursuant to Article 7, which is used to determine the amount, if any, of the payment due to a Grantee upon exercise of the SAR.

2.21 "<u>Fair Market Value</u>" of a Share means a price that is based on the opening, closing, actual, high, low, or the arithmetic mean of selling prices of a Share reported on an established stock exchange which is the principal exchange upon which the Shares are traded on the applicable date or the preceding trading day. Unless the Committee determines otherwise, if the Shares are traded over the counter at the time a determination of its Fair Market Value is required to be made hereunder, Fair Market Value shall be deemed to be equal to the arithmetic mean between the reported high and low or closing bid and asked prices of a Share on the applicable date, or if no such trades were made that day then the most recent date on which Shares were publicly traded. In the event Shares are not publicly traded at the time a determination of their value is required to be made hereunder, the determination of their Fair Market Value shall be made by the Committee in such manner as it deems appropriate provided such manner is consistent with Treasury Regulation Section 1.409A-1(b)(5)(iv)(B).

2.22 "Grant Date" means the date on which an Award is granted or such later date as specified in advance by the Committee.

2.23 "Grantee" means a person who has been granted an Award.

2.24 "Incentive Stock Option" means an Option that is intended to meet the requirements of Section 422 of the Code.

2.25 "Including" or "includes" means "including, without limitation," or "includes, without limitation," respectively.

2.26 "Lead Independent Director" means a Non-Employee Director who has been appointed as lead independent director by the Board, in accord with the policies and procedures of the Company, the Board and the committees thereof.

2.27 "Management Committee" has the meaning set forth in Section 3.1(b).

2.28 "Non-Employee Director" means a member of the Board who is not an employee of the Company or any Affiliate.

2.29 "<u>Non-Employee Director Chair</u>" means a Non-Employee Director who has been appointed to act as chair of one or more committees of the Board, in accord with the policies and procedures of the Company, the Board and the committees thereof.

2.30 "Option" means an option granted under Article 6 of the Plan.

2.31 "Other Stock-Based Award" means a right, granted under Article 13 hereof, that relates to or is valued by reference to Shares or other Awards relating to Shares.

2.32 "<u>Performance Period</u>" means, with respect to an Award of Performance Shares or Performance Units, the period of time during which the performance vesting conditions applicable to such Award must be satisfied.

2.33 "Performance Share" and "Performance Unit" have the respective meanings set forth in Article 9.

2.34 "<u>Period of Restriction</u>" means the period during which Restricted Shares are subject to forfeiture if the conditions specified in the Award Agreement are not satisfied.

2.35 "<u>Person</u>" means any individual, sole proprietorship, partnership, joint venture, limited liability company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, entity or government instrumentality, division, agency, body or department.

2.36 "<u>Restricted Shares</u>" means Shares, granted under Article 8, that are both subject to forfeiture and are nontransferable if the Grantee does not satisfy the conditions specified in the Award Agreement applicable to such Shares.

2.37 "<u>Restricted Stock Units</u>" are rights, granted under Article 10, to receive Shares (or cash in lieu thereof) if the Grantee satisfies the conditions specified in the Award Agreement applicable to such rights.

2.38 "<u>Rule 16b-3</u>" means Rule 16b-3 promulgated by the SEC under the Exchange Act, as amended from time to time, together with any successor rule.

2.39 "SEC" means the United States Securities and Exchange Commission, or any successor thereto.

2.40 "Section 16 Non-Employee Director" means a member of the Board who satisfies the requirements to qualify as a "non-employee director" under Rule 16b-3.

2.41 "Section 16 Person" means a person who is subject to potential liability under Section 16(b) of the Exchange Act with respect to transactions involving equity securities of the Company.

2.42 "Separation from Service" means, with respect to any Award that constitutes deferred compensation within the meaning of Code Section 409A, a "separation from service" as defined in Treasury Regulation Section 1.409A-1(h). For this purpose, a "separation from service" is deemed to occur on the date that the Company and the Grantee reasonably anticipate that the level of bona fide services the Grantee would perform for the Company and/or any Affiliates after that date (whether as an employee, Non-Employee Director or consultant or independent contractor) would permanently decrease to a level that, based on the facts and circumstances, would constitute a separation from service; provided that a decrease to a level that is 50% or more of the average level of bona fide services provided over the prior 36 months shall not be a separation from service, and a decrease to a level that is 20% or less of the average level of such bona fide service shall be a separation from service. The Committee retains the right and discretion to specify, and may specify, whether a separation from service occurs with respect to those individuals who are performing services for the Company or an Affiliate immediately prior to an asset purchase transaction in which the Company or an Affiliate is the seller and who continue to perform services for the buyer (or an affiliate thereof) immediately following such asset purchase transaction; provided, such specification is made in accordance with the requirements of Treasury Regulation Section 1.409A-1(h)(4).

2.43 "Share" means a share of Common Stock, and such other securities of the Company, as may be substituted or resubstituted for Shares pursuant to Section 4.2 hereof.

2.44 "Stock Appreciation Right" or "SAR" means an Award granted under Article 7 of the Plan.

2.45 "<u>Subsidiary Corporation</u>" means a corporation other than the Company in an unbroken chain of corporations beginning with the Company if, at the time of granting the Option, each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

2.46 "<u>Surviving Company</u>" means (a) the surviving corporation in any merger, consolidation or similar transaction, involving the Company (including the Company if the Company is the surviving corporation), (b) or the direct or indirect parent company of such surviving corporation or (c) the direct or indirect parent company of the Company following a sale of substantially all of the outstanding stock of the Company.

2.47 "Term" of any Option or SAR means the period beginning on the Grant Date of an Option or SAR and ending on the date such Option or SAR expires, terminates or is cancelled. No Option or SAR granted under this Plan shall have a Term exceeding 10 years.

2.48 "<u>Termination of Affiliation</u>" occurs on the first day on which an individual is for any reason no longer performing services for the Company or any Affiliate in the capacity of an employee of, a non-employee consultant to, or a Non-Employee Director of, the Company or any Affiliate or with respect to an individual who is an employee of, a non-employee consultant to or a Non-Employee Director of an Affiliate, the first day on which such entity ceases to be an Affiliate of the Company unless such individual continues to perform Services for the Company or another Affiliate without interruption after such entity ceases to be an Affiliate. Notwithstanding the foregoing, if an Award constitutes deferred compensation within the meaning of Code Section 409A, Termination of Affiliation with respect to such Award shall mean the Grantee's Separation from Service.

ARTICLE 3. ADMINISTRATION

3.1 Committee.

(a) Subject to Article 14, and to Section 3.2, the Plan shall be administered by a Committee (the "Incentive Plan Committee" or the "Committee") of directors of the Company appointed by the Board from time to time. Notwithstanding the foregoing, either the Board or the Compensation Committee may at any time and in one or more instances reserve administrative powers to itself as the Committee or exercise any of the administrative powers of the Committee. The number of members of the Committee may from time to time be increased or decreased as the Board or Compensation Committee deems appropriate. To the extent the Board or Compensation Committee considers it desirable to comply with Rule 16b-3, the Committee shall consist of two or more directors of the Company, all of whom qualify as Section 16 Non-Employee Directors.

(b) The Board or the Compensation Committee may appoint and delegate to another committee ("Management Committee"), or to the CEO, any or all of the authority of the Board or the Committee, as applicable, with respect to Awards to Grantees other than Grantees who are executive officers, Non-Employee Directors, or Section 16 Persons at the time any such delegated authority is exercised.

(c) Unless the context requires otherwise, any references herein to "Committee" include references to the Incentive Plan Committee, the Board or the Compensation Committee to the extent Incentive Plan Committee, the Board or the Compensation Committee, as applicable, has assumed or exercises administrative powers itself as the Committee pursuant to subsection (a), and to the Management Committee or the CEO to the extent either has been delegated authority pursuant to subsection (b), as applicable; provided that (i) for purposes of Awards to Non-Employee Directors, "Committee" shall include only the full Board, and (ii) for purposes of Awards intended to comply with Rule 16b-3, the "Committee" shall include only the Incentive Plan Committee.

3.2 <u>Powers of Committee</u>. Subject to and consistent with the provisions of the Plan (including Article 14), the Committee has full and final authority and sole discretion as follows; provided that any such authority or discretion exercised with respect to a specific Non-Employee Director shall be approved by the affirmative vote of a majority of the members of the Board, even if not a quorum, but excluding the Non-Employee Director with respect to whom such authority or discretion is exercised:

(a) to determine when, to whom and in what types and amounts Awards should be granted;

(b) to grant Awards to Eligible Persons in any number and to determine the terms and conditions applicable to each Award (including the number of Shares or the amount of cash or other property to which an Award will relate, any Exercise Price or purchase price, any limitation or restriction, any schedule for or performance conditions relating to the earning of the Award or the lapse of limitations, forfeiture restrictions, restrictions on exercisability or transferability, any performance goals including those relating to the Company and/or an Affiliate and/or any division thereof and/or an individual, and/or vesting based on the passage of time, based in each case on such considerations as the Committee shall determine);

(c) to determine the benefit payable under any Performance Unit, Performance Share, Dividend Equivalent, Other Stock-Based Award or Cash Incentive Award and to determine whether any performance or vesting conditions have been satisfied;

(d) to determine whether or not specific Awards shall be granted in connection with other specific Awards, and if so, whether they shall be exercisable cumulatively with, or alternatively to, such other specific Awards and all other matters to be determined in connection with an Award;

(e) to determine the Term of any Option or SAR;

(f) to determine the amount, if any, that a Grantee shall pay for Restricted Shares, whether to permit or require the payment of cash dividends thereon to be deferred and the terms related thereto, when Restricted Shares (including Restricted Shares acquired upon the exercise of an Option) shall be forfeited and whether such shares shall be held in escrow;

(g) to determine whether, to what extent and under what circumstances an Award may be settled in, or the exercise price of an Award may be paid in, cash, Shares, other Awards or other property, or an Award may be accelerated, vested, canceled, forfeited or surrendered or any terms of the Award may be waived, and to accelerate the exercisability of, and to accelerate or waive any or all of the terms and conditions applicable to, any Award or any group of Awards for any reason and at any time;

(h) to determine with respect to Awards granted to Eligible Persons whether, to what extent and under what circumstances cash, Shares, other Awards, other property and other amounts payable with respect to an Award will be deferred, either at the election of the Grantee or automatically pursuant to the terms of the Award Agreement;

(i) to offer to exchange or buy out any previously granted Award for a payment in cash, Shares or other Award;

(j) to construe and interpret the Plan and to make all determinations, including factual determinations, necessary or advisable for the administration of the Plan;

(k) to make, amend, suspend, waive and rescind rules and regulations relating to the Plan;

(l) to appoint such agents as the Committee may deem necessary or advisable to administer the Plan;

(m) to determine the terms and conditions of all Award Agreements applicable to Eligible Persons (which need not be identical) and, with the consent of the Grantee, to amend any such Award Agreement at any time, among other things, to permit transfers of such Awards to the extent permitted by the Plan; provided that the consent of the Grantee shall not be required for any amendment (i) which does not adversely affect the rights of the Grantee, or (ii) which is necessary or advisable (as determined by the Committee) to carry out the purpose of the Award as a result of any new applicable law or change in an existing applicable law, or (iii) to the extent the Award Agreement specifically permits amendment without consent;

(n) to cancel, with the consent of the Grantee, outstanding Awards and to grant new Awards in substitution therefor;

(o) to impose such additional terms and conditions upon the grant, exercise or retention of Awards as the Committee may, before or concurrently with the grant thereof, deem appropriate, including limiting the percentage of Awards which may from time to time be exercised by a Grantee;

(p) to make adjustments in the terms and conditions of, and the criteria in, Awards in recognition of unusual or nonrecurring events (including events described in Section 4.2) affecting the Company or an Affiliate or the financial statements of the Company or an Affiliate, or in response to changes in applicable laws, regulations or accounting principles;

(q) to correct any defect or supply any omission or reconcile any inconsistency, and to construe and interpret the Plan, the rules and regulations, and Award Agreement or any other instrument entered into or relating to an Award under the Plan; and

(r) to take any other action with respect to any matters relating to the Plan for which it is responsible and to make all other decisions and determinations as may be required under the terms of the Plan or as the Committee may deem necessary or advisable for the administration of the Plan.

Any action of the Committee with respect to the Plan shall be final, conclusive and binding on all persons, including the Company, its Affiliates, any Grantee, any person claiming any rights under the Plan from or through any Grantee, and stockholders, except to the extent the Committee may subsequently modify, or take further action not consistent with, its prior action. If not specified in the Plan, the time at which the Committee must or may make any determination shall be determined by the Committee, and any such determination may thereafter be modified by the Committee. The express grant of any specific power to the Committee, and the taking of any action by the Committee, shall not be construed as limiting any power or authority of the Committee. Subject to Section 3.1(b), the Committee may delegate to officers of the Company or any Affiliate the authority, subject to such terms as the Committee shall determine, to perform specified functions under the Plan.

3.3 <u>No Repricings</u>. Notwithstanding any provision in Section 3.2 to the contrary, the terms of any outstanding Option or SAR may not be amended: (i) to reduce the Exercise Price of such Option or SAR, (ii) cancel any outstanding Option or SAR in exchange for other Options or SARs with an Exercise Price that is less than the Exercise Price of the cancelled Option or SAR or for any cash payment (or Shares having with a Fair Market Value) in an amount that exceeds the excess of the Fair Market Value of the Shares underlying such cancelled Option or SAR over the aggregate Exercise Price of such Option or SAR or for any other Award, or (iii) take any other action with respect to an Option or SAR that would be treated as a repricing under the rules and regulations on the principal securities exchange on which the Shares are traded, in each case without stockholder approval; provided, however, that the restrictions set forth in this Section 3.3, shall not apply (i) unless the Company has a class of stock that is registered under Section 12 of the Exchange Act or (ii) to any adjustment allowed under to Section 4.2.

ARTICLE 4. SHARES SUBJECT TO THE PLAN

4.1 <u>Number of Shares Available for Grants</u>. Subject to adjustment as provided in Section 4.2 and the share counting provisions in this Section 4.1, and except as provided in Section 5.6(b), as of the Effective Date, the maximum number of Shares hereby reserved for delivery pursuant to Awards granted under the Plan shall be 9,500,000 Shares. Up to a maximum of 9,500,000 Shares may be delivered pursuant to the exercise of Incentive Stock Options granted hereunder.

If any Shares subject to an Award granted hereunder (other than a Substitute Award granted pursuant to Section 5.6(b)) are forfeited or such Award otherwise terminates without payment or delivery of all or a portion of such Shares (including on payment in Shares on exercise of a SAR), the Shares subject to such Award, to the extent of any such forfeiture or termination, shall again be available for grant under the Plan. In the event that any Shares subject to an Award granted hereunder are withheld or applied as payment (either actually or by attestation) in connection with the exercise of an Award or the withholding or payment of taxes related thereto ("Returned Shares"), such Returned Shares will not be treated as having been delivered for purposes of determining the maximum number of Shares available for grant under the Plan and shall again be treated as available for grant under the Plan.

Shares delivered pursuant to the Plan may be, in whole or in part, authorized and unissued Shares, or treasury Shares, including Shares repurchased by the Company for purposes of the Plan.

4.2 Adjustments in Authorized Shares and Awards; Corporate Transaction, Liquidation or Dissolution.

(a) Adjustment in Authorized Shares and Awards. In the event that the Committee determines that any dividend or other distribution (whether in the form of cash, Shares, or other property), recapitalization, forward or reverse stock split, subdivision, consolidation or reduction of capital, reorganization, merger, consolidation, scheme of arrangement, split-up, spin-off or combination involving the Company or repurchase or exchange of Shares or other securities of the Company or other rights to purchase Shares or other securities of the Company, or other similar corporate transaction or event affects the Shares such that any adjustment is determined by the Committee to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan, then the Committee shall, in such manner as it may deem equitable, adjust any or all of (i) the number and type of Shares (or other securities or property) with respect to which Awards may be granted, (ii) the number and type of Shares (or other securities or property) subject to outstanding Awards, (iii) the Exercise Price with respect to any Option or SAR or, if deemed appropriate, make provision for a cash payment to the holder of an outstanding Award, and (iv) the number and kind of Shares of outstanding Restricted Shares, or the Shares underlying any other form of Award. Notwithstanding the foregoing, no such adjustment shall be authorized with respect to any Options or SARs to the extent that such adjustment would cause the Option or SAR to violate Section 424(a) of the Code or otherwise subject any Grantee to taxation under Section 409A of the Code; and *provided further* that the number of Shares subject to any Award denominated in Shares shall always be a whole number.



(b) <u>Merger, Consolidation or Similar Corporate Transaction</u>. In the event of a merger or consolidation of the Company with or into another corporation or a sale of substantially all of the stock of the Company (a "Corporate Transaction"), unless an outstanding Award is assumed by the Surviving Company or replaced with an equivalent Award granted by the Surviving Company in substitution for such outstanding Award, the Committee shall cancel any outstanding Awards that are not vested and nonforfeitable as of the consummation of such Corporate Transaction (unless the Committee accelerates the vesting of any such Awards) and with respect to any vested and nonforfeitable Awards, the Committee may either (i) allow all Grantees to exercise such Awards of Options and SARs within a reasonable period prior to the consummation of the Corporate Transaction and cancel any outstanding Options or SARs that remain unexercised upon consummation of the Corporate Transaction, or (ii) cancel any or all of such outstanding Awards in exchange for a payment (in cash, or in securities or other property) in an amount equal to the amount that the Grantee would have received (net of the Exercise Price with respect to any Options or SARs) if such vested Awards were settled or distributed or such vested Options and SARs were exercised immediately prior to the consummation of the Corporate Transaction. Notwithstanding the foregoing, if an Option or SAR is not assumed by the Surviving Company or replaced with an equivalent Award issued by the Surviving Company and the Exercise Price with respect to any outstanding Option or SAR exceeds the Fair Market Value of the Shares immediately prior to the consummation of the Corporation Transaction, such Awards shall be cancelled without any payment to the Grantee.

(c) Liquidation or Dissolution of the Company. In the event of the proposed dissolution or liquidation of the Company, each Award will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Committee. Additionally, the Committee may, in the exercise of its sole discretion, cause Awards to be vested and non-forfeitable and cause any conditions on any such Award to lapse, as to all or any part of such Award, including Shares as to which the Award would not otherwise be exercisable or non-forfeitable and allow all Grantees to exercise such Awards of Options and SARs within a reasonable period prior to the consummation of such proposed action. Any Awards that remain unexercised upon consummation of such proposed action shall be cancelled.

(d) <u>Deferred Compensation</u>. Notwithstanding the forgoing provisions of this Section 4.2, if an Award constitutes deferred compensation within the meaning of Code Section 409A, no payment or settlement of such Award shall be made pursuant to Section 4.2(b) or (c), unless the Corporate Transaction or the dissolution or liquidation of the Company, as applicable, constitutes a Change in Control.

ARTICLE 5. ELIGIBILITY AND GENERAL CONDITIONS OF AWARDS

5.1 <u>Eligibility</u>. The Committee may in its discretion grant Awards to any Eligible Person, whether or not he or she has previously received an Award; provided, however, that all Awards made to Non-Employee Directors shall be determined by the Board in its sole discretion.

5.2 Award Agreement. To the extent not set forth in the Plan, the terms and conditions of each Award shall be set forth in an Award Agreement.

5.3 <u>General Terms and Termination of Affiliation</u>. The Committee may impose on any Award or the exercise or settlement thereof, at the date of grant or, subject to the provisions of Section 15.2, thereafter, such additional terms and conditions not inconsistent with the provisions of the Plan as the Committee shall determine, including terms requiring forfeiture, acceleration or pro-rata acceleration of Awards in the event of a Termination of Affiliation by the Grantee. Except as may be required under the Delaware General Corporation Law, Awards may be granted for no consideration other than prior and future services. Except as set forth in an Award Agreement or as otherwise determined by the Committee, (a) all Options and SARs that are not vested and exercisable at the time of a Grantee's Termination of Affiliation, and any other Awards that remain subject to a risk of forfeiture or which are not otherwise vested at the time of the Grantee's Termination of Affiliation shall be forfeited to the Company and (b) all outstanding Options and SARs not previously exercised shall expire three months after the Grantee's Termination of Affiliation.

5.4 Nontransferability of Awards.

(a) Each Award and each right under any Award shall be exercisable only by the Grantee during the Grantee's lifetime, or, if permissible under applicable law, by the Grantee's guardian or legal representative or by a transferee receiving such Award pursuant to a qualified domestic relations order (a "QDRO") as defined in the Code or Title I of the Employee Retirement Income Security Act of 1974, as amended, or the rules thereunder.

(b) No Award (prior to the time, if applicable, Shares are delivered in respect of such Award), and no right under any Award, may be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered by a Grantee otherwise than by will or by the laws of descent and distribution (or in the case of Restricted Shares, to the Company) or pursuant to a QDRO, and any such purported assignment, alienation, pledge, attachment, sale, transfer or encumbrance shall be void and unenforceable against the Company or any Affiliate; provided that the designation of a beneficiary to receive benefits in the event of the Grantee's death shall not constitute an assignment, alienation, pledge, attachment, sale, transfer or encumbrance.

(c) Notwithstanding subsections (a) and (b) above, to the extent provided in the Award Agreement or as otherwise approved by the Committee, Options (other than Incentive Stock Options) and Restricted Shares, may be transferred, without consideration, to a Permitted Transferee. For this purpose, a "Permitted Transferee" in respect of any Grantee means any member of the Immediate Family of such Grantee, any trust of which all of the primary beneficiaries are such Grantee or members of his or her Immediate Family, or any partnership (including limited liability companies and similar entities) of which all of the partners or members are such Grantee or members of his or her Immediate Family; and the "Immediate Family" of a Grantee means the Grantee's spouse, children, stepchildren, grandchildren, parents, stepparents, siblings, grandparents, nieces and nephews. Such Option may be exercised by such transferee in accordance with the terms of the Award Agreement. If so determined by the Committee, a Grantee may, in the manner established by the Committee, designate a beneficiary or beneficiaries to exercise the rights of the Grantee, and to receive any distribution with respect to any Award upon the death of the Grantee. A transferee, beneficiary, guardian, legal representative or other person claiming any rights under the Plan from or through any Grantee shall be subject to and consistent with the provisions of the Plan and any applicable Award Agreement, except to the extent the Plan and Award Agreement otherwise provide with respect to such persons, and to any additional restrictions or limitations deemed necessary or appropriate by the Committee.

(d) Nothing herein shall be construed as requiring the Committee to honor a QDRO except to the extent required under applicable law.

5.5 <u>Cancellation and Rescission of Awards</u>. Unless the Award Agreement specifies otherwise, the Committee may cancel, rescind, suspend, withhold, or otherwise limit or restrict any unexercised Award at any time if the Grantee is not in compliance with all applicable provisions of the Award Agreement and the Plan or if the Grantee has a Termination of Affiliation.

5.6 Stand-Alone, Tandem and Substitute Awards.

(a) Awards granted under the Plan may, in the discretion of the Committee, be granted either alone or in addition to, in tandem with, or in substitution for, any other Award granted under the Plan unless such tandem or substitution Award would subject the Grantee to tax penalties imposed under Section 409A of the Code. If an Award is granted in substitution for another Award or any non-Plan award or benefit, the Committee shall require the surrender of such other Award or non-Plan award or benefit in consideration for the grant of the new Award. Awards granted in addition to or in tandem with other Awards or non-Plan awards or benefits may be granted either at the same time as or at a different time from the grant of such other Awards or non-Plan awards or benefits; provided, however, that if any SAR is granted in tandem with an Incentive Stock Option, such SAR and Incentive Stock Option must have the same Grant Date, Term and the Exercise Price of the SAR may not be less than the Exercise Price of the Incentive Stock Option.

(b) The Committee may, in its discretion and on such terms and conditions as the Committee considers appropriate in the circumstances, grant Awards under the Plan ("Substitute Awards") in substitution for stock and stock-based awards ("Acquired Entity Awards") held by current or former employees or non-employee directors of, or consultants to, another corporation or entity who become Eligible Persons as the result of a merger or consolidation of the employing corporation or other entity (the "Acquired Entity") with the Company or an Affiliate or the acquisition by the Company or an Affiliate of property or stock of the Acquired Entity immediately prior to such merger, consolidation or acquisition in order to preserve for the Grantee the economic value of all or a portion of such Acquired Entity Award at such price as the Committee determines necessary to achieve preservation of economic value. The limitations in Section 4.1 on the number of Shares reserved or available for grants shall not apply to Substitute Awards granted under this Section 5.6(b).

5.7 <u>Compliance with Rule 16b-3</u>. The provisions of this Section 5.7 will not apply unless and until the Company has a class of stock that is registered under Section 12 of the Exchange Act.

(a) <u>Six-Month Holding Period Advice</u>. Unless a Grantee could otherwise dispose of or exercise a derivative security or dispose of Shares delivered under the Plan without incurring liability under Section 16(b) of the Exchange Act, the Committee may advise or require a Grantee to comply with the following in order to avoid incurring liability under Section 16(b) of the Exchange Act: (i) at least six months must elapse from the date of acquisition of a derivative security under the Plan to the date of disposition of the derivative security (other than upon exercise or conversion) or its underlying equity security, and (ii) Shares granted or awarded under the Plan other than upon exercise or conversion of a derivative security must be held for at least six months from the date of grant of an Award.

(b) <u>Reformation to Comply with Exchange Act Rules</u>. To the extent the Committee determines that a grant or other transaction by a Section 16 Person should comply with applicable provisions of Rule 16b-3 (except for transactions exempted under alternative Exchange Act rules), the Committee shall take such actions as necessary to make such grant or other transaction so comply, and if any provision of this Plan or any Award Agreement relating to a given Award does not comply with the requirements of Rule 16b-3 as then applicable to any such grant or transaction, such provision will be construed or deemed amended, if the Committee so determines, to the extent necessary to conform to the then applicable requirements of Rule 16b-3.

(c) <u>Rule 16b-3 Administration</u>. Any function relating to a Section 16 Person shall be performed solely by the Committee or the Board if necessary to ensure compliance with applicable requirements of Rule 16b-3, to the extent the Committee determines that such compliance is desired. Each member of the Committee or person acting on behalf of the Committee shall be entitled to, in good faith, rely or act upon any report or other information furnished to him by any officer, manager or other employee of the Company or any Affiliate, the Company's independent certified public accountants or any executive compensation consultant or attorney or other professional retained by the Company to assist in the administration of the Plan.

5.8 Deferral of Award Payouts. The Committee may permit a Grantee to defer, or if and to the extent specified in an Award Agreement require the Grantee to defer, receipt of the payment of cash or the delivery of Shares that would otherwise be due by virtue of the lapse or waiver of restrictions with respect to Restricted Stock Units, the satisfaction of any requirements or goals with respect to Performance Units or Performance Shares, the lapse or waiver of the deferral period for Deferred Stock, or the lapse or waiver of restrictions with respect to Other Stock-Based Awards or Cash Incentive Awards. If the Committee permits such deferrals, the Committee shall establish rules and procedures for making such deferral elections and for the payment of such deferrals, which shall conform in form and substance with applicable regulations promulgated under Section 409A of the Code and Article 16 to ensure that the Grantee is not subjected to tax penalties under Section 409A of the Code with respect to such deferrals. Except as otherwise provided in an Award Agreement, any payment or any Shares that are subject to such deferral shall be made or delivered to the Grantee as specified in the Award Agreement or pursuant to the Grantee's deferral election.

ARTICLE 6. STOCK OPTIONS

6.1 <u>Grant of Options</u>. Subject to and consistent with the provisions of the Plan, Options may be granted to any Eligible Person in such number, and upon such terms, and at any time and from time to time as shall be determined by the Committee.

6.2 <u>Award Agreement</u>. Each Option grant shall be evidenced by an Award Agreement that shall specify the Exercise Price, the Term of the Option, the number of Shares to which the Option pertains, the time or times at which such Option shall be exercisable and such other provisions as the Committee shall determine.

6.3 <u>Option Exercise Price</u>. The Exercise Price of an Option under this Plan shall be determined in the sole discretion of the Committee but may not be less than 100% of the Fair Market Value of a Share on the Grant Date (other than in the case of Substitute Awards).

6.4 <u>Grant of Incentive Stock Options</u>. At the time of the grant of any Option, the Committee may in its discretion designate that such Option shall be made subject to additional restrictions to permit it to qualify as an Incentive Stock Option. Any Option designated as an Incentive Stock Option:

(a) shall be granted only to an employee of the Company or a Subsidiary Corporation;

(b) shall have an Exercise Price of not less than 100% of the Fair Market Value of a Share on the Grant Date, and, if granted to a person who owns capital stock (including stock treated as owned under Section 424(d) of the Code) possessing more than 10% of the total combined voting power of all classes of capital stock of the Company or any Subsidiary Corporation (a "More Than 10% Owner"), have an Exercise Price not less than 110% of the Fair Market Value of a Share on its Grant Date;

(c) shall be for a period of not more than 10 years (five years if the Grantee is a More Than 10% Owner) from its Grant Date, and shall be subject to earlier termination as provided herein or in the applicable Award Agreement;

(d) shall not have an aggregate Fair Market Value (as of the Grant Date) of the Shares with respect to which Incentive Stock Options (whether granted under the Plan or any other stock option plan of the Grantee's employer or any parent or Subsidiary Corporation ("Other Plans")) are exercisable for the first time by such Grantee during any calendar year ("Current Grant"), determined in accordance with the provisions of Section 422 of the Code, which exceeds \$100,000 (the "\$100,000 Limit");

(e) shall, if the aggregate Fair Market Value of the Shares (determined on the Grant Date) with respect to the Current Grant and all Incentive Stock Options previously granted under the Plan and any Other Plans which are exercisable for the first time during a calendar year ("Prior Grants") would exceed the \$100,000 Limit, be, as to the portion in excess of the \$100,000 Limit, exercisable as a separate option that is not an Incentive Stock Option at such date or dates as are provided in the Current Grant;

(f) shall require the Grantee to notify the Committee of any disposition of any Shares delivered pursuant to the exercise of the Incentive Stock Option under the circumstances described in Section 421(b) of the Code (relating to holding periods and certain disqualifying dispositions) ("Disqualifying Disposition") within 10 days of such a Disqualifying Disposition;

(g) shall by its terms not be assignable or transferable other than by will or the laws of descent and distribution and may be exercised, during the Grantee's lifetime, only by the Grantee; provided, however, that the Grantee may, to the extent provided in the Plan in any manner specified by the Committee, designate in writing a beneficiary to exercise his or her Incentive Stock Option after the Grantee's death; and

(h) shall, if such Option nevertheless fails to meet the foregoing requirements, or otherwise fails to meet the requirements of Section 422 of the Code for an Incentive Stock Option, be treated for all purposes of this Plan, except as otherwise provided in subsections (d) and (e) above, as an Option that is not an Incentive Stock Option.

Notwithstanding the foregoing and Section 3.2, the Committee may, without the consent of the Grantee, at any time before the exercise of an Option (whether or not an Incentive Stock Option), take any action necessary to prevent such Option from being treated as an Incentive Stock Option.

6.5 <u>Payment of Exercise Price</u>. Except as otherwise provided in an Award Agreement, Options shall be exercised by the delivery of a written notice of exercise to the Company, setting forth the number of Shares with respect to which the Option is to be exercised, accompanied by full payment for the Shares made by any one or more of the following means:

(a) cash, personal check or wire transfer;

(b) with the approval of the Committee, delivery of Common Stock owned by the Grantee prior to exercise, valued at Fair Market Value on the date of exercise;

(c) with the approval of the Committee, Shares acquired upon the exercise of such Option, such Shares valued at Fair Market Value on the date of exercise;

(d) with the approval of the Committee, Restricted Shares held by the Grantee prior to the exercise of the Option, valued at Fair Market Value on the date of exercise; or

(e) subject to applicable law (including the prohibited loan provisions of Section 402 of the Sarbanes Oxley Act of 2002), through the sale of the Shares acquired on exercise of the Option through a broker-dealer to whom the Grantee has submitted an irrevocable notice of exercise and irrevocable instructions to deliver promptly to the Company the amount of sale proceeds sufficient to pay for such Shares, together with, if requested by the Company, the amount of federal, state, local or foreign withholding taxes payable by Grantee by reason of such exercise.

The Committee may in its discretion specify that, if any Restricted Shares ("Tendered Restricted Shares") are used to pay the Exercise Price, (x) all the Shares acquired on exercise of the Option shall be subject to the same restrictions as the Tendered Restricted Shares, determined as of the date of exercise of the Option, or (y) a number of Shares acquired on exercise of the Option equal to the number of Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subject to the same restrictions as the Tendered Restricted Shares shall be subj

ARTICLE 7. STOCK APPRECIATION RIGHTS

7.1 <u>Issuance</u>. Subject to and consistent with the provisions of the Plan, the Committee, at any time and from time to time, may grant SARs to any Eligible Person either alone or in addition to other Awards granted under the Plan. Such SARs may, but need not, be granted in connection with a specific Option granted under Article 6. The Committee may impose such conditions or restrictions on the exercise of any SAR as it shall deem appropriate.

7.2 <u>Award Agreements</u>. Each SAR grant shall be evidenced by an Award Agreement in such form as the Committee may approve and shall contain such terms and conditions not inconsistent with other provisions of the Plan as shall be determined from time to time by the Committee.

7.3 <u>SAR Exercise Price</u>. The Exercise Price of a SAR shall be determined by the Committee in its sole discretion; provided that the Exercise Price shall not be less than 100% of the Fair Market Value of a Share on the date of the grant of the SAR (other than in the case of Substitute Awards).

7.4 <u>Exercise and Payment</u>. Upon the exercise of an SAR, a Grantee shall be entitled to receive payment from the Company in an amount determined by multiplying:

(a) The excess of the Fair Market Value of a Share on the date of exercise over the Exercise Price; by

(b) The number of Shares with respect to which the SAR is exercised.

SARs shall be deemed exercised on the date written notice of exercise in a form acceptable to the Committee is received by the Secretary of the Company. The Company shall make payment in respect of any SAR within five (5) days of the date the SAR is exercised. Any payment by the Company in respect of a SAR may be made in cash, Shares, other property, or any combination thereof, as the Committee, in its sole discretion, shall determine or, to the extent permitted under the terms of the applicable Award Agreement, at the election of the Grantee.

ARTICLE 8. RESTRICTED SHARES

8.1 <u>Grant of Restricted Shares</u>. Subject to and consistent with the provisions of the Plan, the Committee, at any time and from time to time, may grant Restricted Shares to any Eligible Person in such amounts as the Committee shall determine.

8.2 <u>Award Agreement</u>. Each grant of Restricted Shares shall be evidenced by an Award Agreement that shall specify the Period(s) of Restriction, the number of Restricted Shares granted, and such other provisions as the Committee shall determine. The Committee may impose such conditions and/or restrictions on any Restricted Shares granted pursuant to the Plan as it may deem advisable, including restrictions based upon the achievement of specific performance goals, time-based restrictions on vesting following the attainment of the performance goals, and/or restrictions under applicable securities laws; provided that such conditions and/or restrictions may lapse, if so determined by the Committee, in the event of the Grantee's Termination of Affiliation due to death, Disability, or involuntary termination by the Company or an Affiliate without Cause.

8.3 Consideration for Restricted Shares. The Committee shall determine the amount, if any, that a Grantee shall pay for Restricted Shares.

8.4 <u>Effect of Forfeiture</u>. If Restricted Shares are forfeited, and if the Grantee was required to pay for such shares or acquired such Restricted Shares upon the exercise of an Option, the Grantee shall be deemed to have resold such Restricted Shares to the Company at a price equal to the lesser of (x) the amount paid by the Grantee for such Restricted Shares, or (y) the Fair Market Value of a Share on the date of such forfeiture. The Company shall pay to the Grantee the deemed sale price as soon as is administratively practical. Such Restricted Shares shall cease to be outstanding and shall no longer confer on the Grantee thereof any rights as a stockholder of the Company, from and after the date of the event causing the forfeiture, whether or not the Grantee accepts the Company's tender of payment for such Restricted Shares.

8.5 <u>Escrow; Legends</u>. The Committee may provide that the certificates for any Restricted Shares (x) shall be held (together with a stock power executed in blank by the Grantee) in escrow by the Secretary of the Company until such Restricted Shares become nonforfeitable or are forfeited and/or (y) shall bear an appropriate legend restricting the transfer of such Restricted Shares under the Plan. If any Restricted Shares become nonforfeitable, the Company shall cause certificates for such shares to be delivered without such legend.

ARTICLE 9. PERFORMANCE UNITS AND PERFORMANCE SHARES

9.1 <u>Grant of Performance Units and Performance Shares</u>. Subject to and consistent with the provisions of the Plan, Performance Units or Performance Shares may be granted to any Eligible Person in such amounts and upon such terms, and at any time and from time to time, as shall be determined by the Committee.

9.2 <u>Value/Performance Goals</u>. The Committee shall set performance goals in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units or Performance Shares that will be paid to the Grantee.

(a) <u>Performance Unit</u>. Each Performance Unit shall have an initial value that is established by the Committee at the time of grant.

(b) <u>Performance Share</u>. Each Performance Share shall have an initial value equal to the Fair Market Value of a Share on the date of grant.

9.3 <u>Earning of Performance Units and Performance Shares</u>. After the applicable Performance Period has ended, the holder of Performance Units or Performance Shares shall be entitled to payment based on the level of achievement of performance goals set by the Committee. At the discretion of the Committee, the settlement of Performance Units or Performance Shares may be in cash, Shares of equivalent value, or in some combination thereof, as set forth in the Award Agreement.

If a Grantee is promoted, demoted or transferred to a different business unit of the Company during a Performance Period, then, to the extent the Committee determines that the Award, the performance goals, or the Performance Period are no longer appropriate, the Committee may adjust, change, eliminate or cancel the Award, the performance goals, or the applicable Performance Period, as it deems appropriate in order to make them appropriate and comparable to the initial Award, the performance goals, or the Performance Period.

Subject to Article 11 and Section 18.6, at the discretion of the Committee, a Grantee may be entitled to receive any dividends or Dividend Equivalents declared with respect to Shares deliverable in connection with vested Performance Shares which have been earned, but not yet delivered to the Grantee.

ARTICLE 10. DEFERRED STOCK AND RESTRICTED STOCK UNITS

10.1 <u>Grant of Deferred Stock and Restricted Stock Units</u>. Subject to and consistent with the provisions of the Plan, the Committee, at any time and from time to time, may grant Deferred Stock and/or Restricted Stock Units to any Eligible Person, in such amount and upon such terms as the Committee shall determine. Deferred Stock must conform in form and substance with applicable regulations promulgated under Section 409A of the Code and with Article 16 to ensure that the Grantee is not subjected to tax penalties under Section 409A of the Code with respect to such Deferred Stock.

10.2 Vesting and Delivery.

(a) <u>Delivery with Respect to Deferred Stock</u>. Delivery of Shares subject to a Deferred Stock grant will occur upon expiration of the deferral period or upon the occurrence of one or more of the distribution events described in Section 409A(a)(2) of the Code as specified by the Committee in the Grantee's Award Agreement for the Award of Deferred Stock. An Award of Deferred Stock may be subject to such substantial risk of forfeiture conditions as the Committee may impose, which conditions may lapse at such times or upon the achievement of such objectives as the Committee shall determine at the time of grant or thereafter. Unless otherwise determined by the Committee, to the extent that the Grantee has a Termination of Affiliation while the Deferred Stock remains subject to a substantial risk of forfeiture, such Deferred Shares shall be forfeited, unless the Committee determines that such substantial risk of forfeiture shall lapse in the event of the Grantee's Termination of Affiliation due to death, Disability, or involuntary termination by the Company or an Affiliate without "cause."

(b) <u>Delivery with Respect to Restricted Stock Units</u>. Delivery of Shares subject to a grant of Restricted Stock Units shall occur no later than the 15th day of the third month following the end of the taxable year of the Grantee or the fiscal year of the Company in which the Grantee's rights under such Restricted Stock Units are no longer subject to a substantial risk of forfeiture as defined in final regulations under Section 409A of the Code. Unless otherwise determined by the Committee, to the extent that the Grantee has a Termination of Affiliation while the Restricted Stock Units remains subject to a substantial risk of forfeiture, such Restricted Stock Units shall be forfeited, unless the Committee determines that such substantial risk of forfeiture shall lapse in the event of the Grantee's Termination of Affiliation due to death, Disability, or involuntary termination by the Company or an Affiliate without "cause."

10.3 Voting and Dividend Equivalent Rights Attributable to Deferred Stock and Restricted Stock Units. A Grantee awarded Deferred Stock or Restricted Stock Units will have no voting rights with respect to such Deferred Stock or Restricted Stock Units prior to the delivery of Shares in settlement of such Deferred Stock and/or Restricted Stock Units. Unless otherwise determined by the Committee, a Grantee will have the rights to receive Dividend Equivalents in respect of Deferred Stock and/or Restricted Stock Units, which Dividend Equivalents shall be deemed reinvested in additional Shares of Deferred Stock or Restricted Stock Units, as applicable, which shall remain subject to the same forfeiture conditions applicable to the Deferred Stock or Restricted Stock Units to which such Dividend Equivalents relate.

ARTICLE 11. DIVIDEND EQUIVALENTS

The Committee is authorized to grant Awards of Dividend Equivalents alone or in conjunction with other Awards. The Committee may provide that Dividend Equivalents shall be paid or distributed when accrued or shall be deemed to have been reinvested in additional Shares or additional Awards or otherwise reinvested subject to distribution at the same time and subject to the same conditions as the Award to which it relates; provided, however, that any Dividend Equivalents granted in conjunction with any Award that is subject to forfeiture conditions shall remain subject to the same forfeiture conditions applicable to the Award to which such Dividend Equivalents relate and no Dividend Equivalents shall be granted in conjunction with any Options or SARs. The timing of payment or distribution of Dividend Equivalents must comply with the requirements of Section 409A of the Code.

ARTICLE 12. BONUS SHARES

Subject to the terms of the Plan, the Committee may grant Bonus Shares to any Eligible Person, in such amount and upon such terms and at any time and from time to time as shall be determined by the Committee.

ARTICLE 13. OTHER STOCK-BASED AWARDS

The Committee is authorized, subject to limitations under applicable law, to grant such other Awards that are denominated or payable in, valued in whole or in part by reference to, or otherwise based on, or related to, Shares, as deemed by the Committee to be consistent with the purposes of the Plan, including Shares awarded which are not subject to any restrictions or conditions, convertible or exchangeable debt securities or other rights convertible or exchangeable into Shares, and Awards valued by reference to the value of securities of or the performance of specified Affiliates. Subject to and consistent with the provisions of the Plan, the Committee shall determine the terms and conditions of such Awards. Except as provided by the Committee, Shares delivered pursuant to a purchase right granted under this Article 13 shall be purchased for such consideration, paid for by such methods and in such forms, including cash, Shares, outstanding Awards or other property, as the Committee shall determine.

ARTICLE 14. NON-EMPLOYEE DIRECTOR AWARDS

14.1 <u>Non-Employee Director Awards</u>. Subject to the terms of the Plan, the Board may grant Awards to any Non-Employee Director, in such amount and upon such terms and at any time and from time to time as shall be determined by the full Board in its sole discretion. Except as otherwise provided in Section 5.6(b) and in this Article 14, a Non-Employee Director may not be granted Awards for cash or Shares that together with any awards made outside of the Plan have a Fair Market Value (determined as of the date of grant) in excess of (i) \$1,000,000 in a single calendar year or (ii) \$2,000,000 in the calendar year during which the Non-Employee Director was appointed to the Board.

14.2 <u>Lead Independent Director and Non-Employee Director Chair Awards</u>. Except as otherwise provided in Section 5.6(b), a Lead Independent Director or Non-Employee Director Chair may not be granted Awards for cash or Shares that together with any awards made outside of the Plan have a Fair Market Value (determined as of the date of grant) in excess of \$2,000,000 in a single calendar year.

ARTICLE 15. AMENDMENT, MODIFICATION, AND TERMINATION

15.1 <u>Amendment, Modification, and Termination</u>. Subject to Section 15.2, the Board may, at any time and from time to time, alter, amend, suspend, discontinue or terminate the Plan in whole or in part without the approval of the Company's stockholders, except that (a) any amendment or alteration shall be subject to the approval of the Company's stockholders if such stockholder approval is required by any federal or state law or regulation or the rules of any stock exchange or automated quotation system on which the Shares may then be listed or quoted, and (b) the Board may otherwise, in its discretion, determine to submit other such amendments or alterations to stockholders for approval.

15.2 <u>Awards Previously Granted</u>. Except as otherwise specifically permitted in the Plan or an Award Agreement, no termination, amendment, or modification of the Plan shall adversely affect in any material way any Award previously granted under the Plan, without the written consent of the Grantee of such Award.

ARTICLE 16. COMPLIANCE WITH CODE SECTION 409A

16.1 <u>Awards Subject to Code Section 409A</u>. The provisions of this Article 16 shall apply to any Award or portion thereof that is or becomes deferred compensation subject to Code Section 409A (a "409A Award"), notwithstanding any provision to the contrary contained in the Plan or the Award Agreement applicable to such Award.

16.2 <u>Deferral and/or Distribution Elections</u>. Except as otherwise permitted or required by Code Section 409A, the following rules shall apply to any deferral and/or elections as to the form or timing of distributions (each, an "Election") that may be permitted or required by the Committee with respect to a 409A Award:

(a) Any Election must be in writing and specify the amount being deferred, and the time and form of distribution (i.e., lump sum or installments) as permitted by this Plan. An Election may but need not specify whether payment will be made in cash, Shares or other property.

(b) Any Election shall become irrevocable as of the deadline specified by the Committee, which shall not be later than December 31 of the year preceding the year in which services relating to the Award commence; provided, however, that if the Award qualifies as "performance-based compensation" for purposes of Code Section 409A and is based on services performed over a period of at least twelve (12) months, then the deadline may be no later than six (6) months prior to the end of such Performance Period.

(c) Unless otherwise provided by the Committee, an Election shall continue in effect until a written election to revoke or change such Election is received by the Committee, prior to the last day for making an Election for the subsequent year.

16.3 <u>Subsequent Elections</u>. Except as otherwise permitted or required by Code Section 409A, any 409A Award which permits a subsequent Election to further defer the distribution or change the form of distribution shall comply with the following requirements:

(a) No subsequent Election may take effect until at least twelve (12) months after the date on which the subsequent Election is made;

(b) Each subsequent Election related to a distribution upon separation from service, a specified time, or a Change in Control must result in a delay of the distribution for a period of not less than five (5) years from the date such distribution would otherwise have been made; and

(c) No subsequent Election related to a distribution to be made at a specified time or pursuant to a fixed schedule shall be made less than twelve (12) months prior to the date the first scheduled payment would otherwise be made.

16.4 Distributions Pursuant to Deferral Elections. Except as otherwise permitted or required by Code Section 409A, no distribution in settlement of a 409A Award may commence earlier than:

(a) Separation from Service;

(b) The date the Participant becomes Disabled (as defined in Section 2.15(b);

(c) The Participant's death;

(d) A specified time (or pursuant to a fixed schedule) that is either (i) specified by the Committee upon the grant of the Award and set forth in the Award Agreement or (ii) specified by the Grantee in an Election complying with the requirements of Section 16.2 and/or 16.3, as applicable; or

(e) A change in ownership of the Company or a substantial portion of its assets within the meaning of Treasury Regulation Section 1.409A-3(i) (5)(v) or (vii) or a change in effective control of the Company within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(vi) (a "Change in Control").

16.5 <u>Six Month Delay</u>. Notwithstanding anything herein or in any Award Agreement or Election to the contrary, to the extent that distribution of a 409A Award is triggered by a Grantee's Separation from Service, if the Grantee is then a "specified employee" (as defined in Treasury Regulation Section 1.409A-1(i)), no distribution may be made before the date which is six (6) months after such Grantee's Separation from Service, or, if earlier, the date of the Grantee's death.

16.6 <u>Death or Disability</u>. Unless the Award Agreement otherwise provides, if a Grantee dies or becomes Disabled before complete distribution of amounts payable upon settlement of a 409A Award, such undistributed amounts, to the extent vested, shall be distributed as provided in the Participants Election. If the Participant has made no Election with respect to distributions upon death or Disability, all such distributions shall be paid in a lump sum within 90 days following the date of the Participant's death or Disability.

16.7 <u>No Acceleration of Distributions</u>. This Plan does not permit the acceleration of the time or schedule of any distribution under a 409A Award, except as provided by Code Section 409A and/or applicable regulations or rulings issued thereunder.

ARTICLE 17. WITHHOLDING

17.1 Required Withholding.

(a) The Committee in its sole discretion may provide that when taxes are to be withheld in connection with the exercise of an Option or SAR, or upon the lapse of restrictions on Restricted Shares, or upon the transfer of Shares, or upon payment of any other benefit or right under this Plan (the date on which such exercise occurs or such restrictions lapse or such payment of any other benefit or right occurs hereinafter referred to as the "Tax Date"), the Grantee may elect to make payment for the withholding of federal, state and local taxes, including Social Security and Medicare ("FICA") taxes by one or a combination of the following methods:

(i) payment of an amount in cash equal to the amount to be withheld (including cash obtained through the sale of the Shares acquired on exercise of an Option or SAR, upon the lapse of restrictions on Restricted Shares, or upon the transfer of Shares, through a broker-dealer to whom the Grantee has submitted an irrevocable instructions to deliver promptly to the Company, the amount to be withheld);

(ii) delivering part or all of the amount to be withheld in the form of Common Stock valued at its Fair Market Value on the Tax Date;

(iii) requesting the Company to withhold from those Shares that would otherwise be received upon exercise of the Option or SAR, upon the lapse of restrictions on Restricted Stock, or upon the transfer of Shares, a number of Shares having a Fair Market Value on the Tax Date equal to the amount to be withheld; or

(iv) withholding from any compensation otherwise due to the Grantee.

The Committee in its sole discretion may provide that the maximum amount of tax withholding upon exercise of an Option or SARs, upon the lapse of restrictions on Restricted Shares, or upon the transfer of Shares, to be satisfied by withholding Shares upon exercise of such Option or SAR, upon the lapse of restrictions on Restricted Shares, or upon the transfer of Shares, pursuant to clause (iii) above shall not exceed the minimum amount of taxes, including FICA taxes, required to be withheld under federal, state and local law. An election by Grantee under this subsection is irrevocable. Any fractional share amount and any additional withholding not paid by the withholding or surrender of Shares must be paid in cash. If no timely election is made, the Grantee must deliver cash to satisfy all tax withholding requirements.

(b) Any Grantee who makes a Disqualifying Disposition (as defined in Section 6.4(f)) or an election under Section 83(b) of the Code shall remit to the Company an amount sufficient to satisfy all resulting tax withholding requirements in the same manner as set forth in subsection (a).

17.2 Notification under Code Section 83(b). If the Grantee, in connection with the exercise of any Option, or the grant of Restricted Shares, makes the election permitted under Section 83(b) of the Code to include in such Grantee's gross income in the year of transfer the amounts specified in Section 83(b) of the Code, then such Grantee shall notify the Company of such election within 10 days of filing the notice of the election with the Internal Revenue Service, in addition to any filing and notification required pursuant to regulations issued under Section 83(b) of the Code. The Committee may, in connection with the grant of an Award or at any time thereafter, prohibit a Grantee from making the election described above.

ARTICLE 18. ADDITIONAL PROVISIONS

18.1 <u>Successors</u>. Subject to Section 4.2(b), all obligations of the Company under the Plan with respect to Awards granted hereunder shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise of all or substantially all of the business and/or assets of the Company.

18.2 <u>Severability</u>. If any part of the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any other part of the Plan. Any Section or part of 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.

18.3 <u>Requirements of Law</u>. The granting of Awards and the delivery of Shares under the Plan shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required. Notwithstanding any provision of the Plan or any Award, Grantees shall not be entitled to exercise, or receive benefits under, any Award, and the Company (and any Affiliate) shall not be obligated to deliver any Shares or deliver benefits to a Grantee, if such exercise or delivery would constitute a violation by the Grantee or the Company of any applicable law or regulation.

18.4 Securities Law Compliance.

(a) If the Committee deems it necessary to comply with any applicable securities law, or the requirements of any stock exchange upon which Shares may be listed, the Committee may impose any restriction on Awards or Shares acquired pursuant to Awards under the Plan as it may deem advisable. In addition, if requested by the Company and any underwriter engaged by the Company, Shares acquired pursuant to Awards may not be sold or otherwise transferred or disposed of for such period following the effective date of any registration statement of the Company filed under the Securities Act as the Company or such underwriter shall specify reasonably and in good faith, not to exceed 180 days in the case of the Company's initial public offering or 90 days in the case of any other public offering. All certificates for Shares delivered under the Plan pursuant to any Award or the exercise thereof shall be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the rules, regulations and other requirements of the SEC, any stock exchange upon which Shares are then listed, any applicable securities law, and the Committee may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions. If so requested by the Company, the Grantee shall make a written representation to the Company that he or she will not sell or offer to sell any Shares unless a registration statement shall be in effect with respect to such Shares under the Securities Act of 1933, as amended, and any applicable state securities law or unless he or she shall have furnished to the Company, in form and substance satisfactory to the Company, that such registration is not required.

(b) If the Committee determines that the exercise or nonforfeitability of, or delivery of benefits pursuant to, any Award would violate any applicable provision of securities laws or the listing requirements of any national securities exchange or national market system on which are listed any of the Company's equity securities, then the Committee may postpone any such exercise, nonforfeitability or delivery, as applicable, but the Company shall use all reasonable efforts to cause such exercise, nonforfeitability or delivery to comply with all such provisions at the earliest practicable date.

18.5 Forfeiture Events. Notwithstanding any provisions herein to the contrary, the Committee shall have the authority to determine (and may so provide in any Award Agreement) that a Grantee's (including his or her estate's, beneficiary's or transferee's) rights (including the right to exercise any Option or SAR), payments and benefits with respect to any Award shall be subject to reduction, cancellation, forfeiture or recoupment (to the extent permitted by applicable law) in the event of the Participant's termination for Cause; serious misconduct; violation of the Company's or an Affiliate's policies; breach of fiduciary duty; unauthorized disclosure of any trade secret or confidential information of the Company or an Affiliate; breach of applicable noncompetition, nonsolicitation, confidentiality or other restrictive covenants; or other conduct or activity that is in competition with the business of the Company or an Affiliate, or otherwise detrimental to the business, reputation or interests of the Company and/or an Affiliate; or upon the occurrence of certain events specified in the applicable Award Agreement (in any such case, whether or not the Grantee is then an Employee or Non-Employee Director). The determination of whether a Grantee's conduct, activities or circumstances are described in the immediately preceding sentence shall be made by the Committee in its discretion, and pending any such determination, the Committee shall have the authority to suspend the exercise, payment, delivery or settlement of all or any portion of such Grantee's outstanding Awards pending any investigation of the matter.

18.6 No Rights as a Stockholder. No Grantee shall have any rights as a stockholder of the Company with respect to the Shares (other than Restricted Shares) which may be deliverable upon exercise or payment of such Award until such Shares have been delivered to him or her. Restricted Shares, whether held by a Grantee or in escrow by the Secretary of the Company, shall confer on the Grantee all rights of a stockholder of the Company, except as otherwise provided in the Plan or Award Agreement. At the time of a grant of Restricted Shares, the Committee may require the payment of cash dividends thereon to be deferred and, if the Committee so determines, reinvested in additional Restricted Shares. Stock dividends and deferred cash dividends issued with respect to Restricted Shares shall be subject to the same restrictions and other terms as apply to the Restricted Shares with respect to which such dividends are issued. The Committee may in its discretion provide for payment of interest on deferred cash dividends.

18.7 <u>Nature of Payments</u>. Unless otherwise specified in the Award Agreement, Awards shall be special incentive payments to the Grantee and shall not be taken into account in computing the amount of salary or compensation of the Grantee for purposes of determining any pension, retirement, death or other benefit under (a) any pension, retirement, profit sharing, bonus, insurance or other employee benefit plan of the Company or any Affiliate, except as such plan shall otherwise expressly provide, or (b) any agreement between (i) the Company or any Affiliate and (ii) the Grantee, except as such agreement shall otherwise expressly provide.

18.8 <u>Non-Exclusivity of Plan</u>. Neither the adoption of the Plan by the Board nor its submission to the stockholders of the Company for approval shall be construed as creating any limitations on the power of the Board to adopt such other compensatory arrangements for employees or Non-Employee Directors as it may deem desirable.

18.9 <u>Governing Law</u>. The Plan, and all agreements hereunder, shall be construed in accordance with and governed by the laws of the State of Delaware, other than its laws respecting choice or conflicts of law rule or principles that might otherwise refer construction or interpretation of the Plan to the substantive law of another jurisdiction. Unless otherwise provided in the Award Agreement, Participants are deemed to submit to the exclusive jurisdiction and venue of the federal or state courts of the State of Delaware, to resolve any and all issues that may arise out of or relate to the Plan or any related Award Agreement.

18.10 <u>Unfunded Status of Awards; Creation of Trusts</u>. The Plan is intended to constitute an "unfunded" plan for incentive and deferred compensation. With respect to any payments not yet made to a Grantee pursuant to an Award, nothing contained in the Plan or any Award Agreement shall give any such Grantee any rights that are greater than those of a general creditor of the Company; provided, however, that the Committee may authorize the creation of trusts or make other arrangements to meet the Company's obligations under the Plan to deliver cash, Shares or other property pursuant to any Award which trusts or other arrangements shall be consistent with the "unfunded" status of the Plan unless the Committee otherwise determines.

18.11 <u>Affiliation</u>. Nothing in the Plan or an Award Agreement shall interfere with or limit in any way the right of the Company or any Affiliate to terminate any Grantee's employment or consulting contract at any time, nor confer upon any Grantee the right to continue in the employ of or as an officer of or as a consultant to or Non-Employee Director of the Company or any Affiliate.

18.12 <u>Participation</u>. No employee or officer shall have the right to be selected to receive an Award under this Plan or, having been so selected, to be selected to receive a future Award.

18.13 <u>Military Service</u>. Awards shall be administered in accordance with Section 414(u) of the Code and the Uniformed Services Employment and Reemployment Rights Act of 1994.

18.14 <u>Construction</u>. The following rules of construction will apply to the Plan: (a) the word "or" is disjunctive but not necessarily exclusive, and (b) words in the singular include the plural, words in the plural include the singular, and words in the neuter gender include the masculine and feminine genders and words in the masculine or feminine gender include the other neuter genders.

18.15 <u>Headings</u>. The headings of articles and sections are included solely for convenience of reference, and if there is any conflict between such headings and the text of this Plan, the text shall control.

18.16 <u>Obligations</u>. Unless otherwise specified in the Award Agreement, the obligation to deliver, pay or transfer any amount of money or other property pursuant to Awards under this Plan shall be the sole obligation of a Grantee's employer; provided that the obligation to deliver or transfer any Shares pursuant to Awards under this Plan shall be the sole obligation of the Company.

18.17 <u>No Right to Continue as Director</u>. Nothing in the Plan or any Award Agreement shall confer upon any Non-Employee Director the right to continue to serve as a director of the Company.

18.18 <u>Stockholder Approval</u>. All Incentive Stock Options granted on or after the Effective Date and prior to the date the Company's stockholders approve the Plan are expressly conditioned upon and subject to approval of the Plan by the Company's stockholders.

You May Vote Your Proxy When You View The Material On The Internet. You Will Be Asked To Follow The Prompts To Vote Your Shares.

ARCTURUS THERAPEUTICS HOLDINGS INC.

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

to be held on June 21, 2022

*Shareholders are cordially invited to attend the Virtual Annual Meeting and to vote on the Internet or any Mobile device.

Dear Stockholder,

The 2022 Annual Meeting of Shareholders of Arcturus Therapeutics Holdings Inc. (the "Company") will be conducted virtually over the Internet. You will be able to attend the annual meeting, vote your shares electronically and submit your questions during the live webcast of the meeting being held on June 21, 2022, at 9:00 a.m. Pacific Time by visiting https://www.cstproxy.com/arcturusrx/2022.

Proposals to be considered at the Annual Meeting:

- (1) To elect to the Company's Board of Directors seven persons nominated by the Board of Directors;
- (2) To approve, by non-binding advisory vote, the resolution approving named executive officer compensation;
- (3) To approve the Amendment to the Company's Amended and Restated 2019 Omnibus Equity Incentive Plan to increase the number of shares available to plan participants and increase the fair market value of compensation our non-employee directors may receive during a calendar year;
- (4) To approve, on a non-binding advisory basis, the preferred frequency of stockholder advisory votes on executive compensation, referred to as "say-on-frequency."
- (5) To ratify the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for fiscal year ending December 31, 2022; and
- (6) To address such other matters as may properly come before the 2022 annual meeting or any adjournment or postponement thereof.

The Board of Directors recommends a vote "FOR" all nominees in Proposal 1, "FOR" Proposals 2, 3 and 5, and for "THREE YEARS" as to Proposal 4.

Your electronic vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed, dated, and returned the proxy card.

Vote at the Meeting –

If you plan to attend the virtual online annual meeting, you will need your 12 digit control number to vote electronically at the annual meeting

To view the Proxy Materials and attend the annual meeting, please go to: https://www.cstproxy.com/arcturusrx/2022

Vote Your Proxy on the Internet:

Go to http://www.cstproxyvote.com Have your notice available when you access the above website. Follow the prompts to vote your shares.

CONTROL NUMBER

ARCTURUS THERAPEUTICS HOLDINGS INC.

Important Notice Regarding the Availability of Proxy Materials For the 2022 Annual Meeting of Stockholders to be Held On June 21, 2022.

The following Proxy Materials are available to you to review at: https://www.cstproxy.com/arcturusrx/2022

- the Company's Annual Report for the year ended December 31, 2021.
- the Company's 2022 Proxy Statement.
- the Proxy Card.
- any amendments to the foregoing materials that are required to be furnished to shareholders.

This is not a ballot. You cannot use this notice to vote your shares. This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. We encourage you to access and review all of the important information contained in the proxy materials before voting.

If you would like to receive a paper or e-mail copy of these documents, you must request one. There is no charge for such documents to be mailed to you. Please make your request for a copy as instructed below on or before June 20, 2022 to facilitate a timely delivery. You may also request that you receive paper copies of all future proxy materials from the Company.

ACCESSING YOUR PROXY MATERIALS ONLINE

Have this notice available when you request a paper copy of the proxy materials or to vote your proxy electronically. You must reference your Control number.

REQUESTING A PAPER COPY OF THE PROXY MATERIALS

By telephone please call 917-262-2373, or

By logging on to https://www.cstproxy.com/arcturusrx/2022 or

By email at: proxy@continentalstock.com

Please include the company name and your control number in the subject line.