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As filed with the Securities and Exchange Commission on March 18, 2019

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ARCTURUS THERAPEUTICS HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Delaware	**7389**	**46-1981974**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

c/o Arcturus Therapeutics Holdings Inc.
10628 Science Center Drive, Suite 250
San Diego, California 92121
(858) 900-2660
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Joseph E. Payne
Arcturus Therapeutics Holdings Inc.
10628 Science Center Drive, Suite 250
San Diego, California 92121
(858) 900-2660
(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:

Jeffrey A. Baumel, Esq.
Ilan Katz, Esq.
Greg Carney, Esq.
Dentons US LLP
1221 Avenue of the Americas
New York, NY 10020-1089
Telephone: (212) 768-6700

Approximate date of commencement of proposed sale of the securities to the public: As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions to the transactions described herein.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act . ☐

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) ☐

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	**Amount to be Registered(1)**	**Proposed Maximum Offering Price Per Share**	**Proposed Maximum Aggregate Offering Price(2)**	**Amount of Registration Fee**
Shares of common stock, par value $0.001 per share, of Arcturus Therapeutics Holdings Inc., a Delaware corporation ("**Arcturus-Delaware common stock**")	10,761,523	Not applicable	$54,211,172	$6,571

(1) Represents the maximum number of shares of Arcturus-Delaware common stock estimated to be issued by the registrant to the shareholders of Arcturus Therapeutics Ltd., a company organized under the laws of the State of Israel ("**Arcturus-Israel**"), in connection with the proposed redomicile transaction described herein (the "**Transaction**") of Arcturus-Israel and Arcturus-Delaware. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "**Securities Act**"), there are also being registered such additional shares of Arcturus-Delaware common stock that may be issued because of events such as recapitalizations, stock dividends, stock splits and reverse stock splits, and similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee required by Section 6(b) of the Securities Act and computed pursuant to Rule 457(f)(2) under the Securities Act. Calculated as the product obtained by multiplying (i) 10,761,523 (the total number of Arcturus-Israel Ordinary Shares, par value New Israeli Shekel 0.07 per share ("**Ordinary Shares**"), outstanding as of March 14, 2019, other than any Ordinary Shares held by Arcturus-Israel) *times* (ii) $5.0375 which is the average of the high and low sale price of the Ordinary Shares as reported on the NASDAQ Global Market on March 14, 2019.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a), may determine.

The information in this consent proxy statement/prospectus is subject to completion and amendment. A registration statement relating to the securities described in this proxy statement/prospectus has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy these securities be accepted prior to the time the registration statement becomes effective. This proxy statement/prospectus shall not constitute an offer to sell or the solicitation of any offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration under the securities laws of any such jurisdiction.

PRELIMINARY—SUBJECT TO COMPLETION, DATED MARCH 18, 2019

PROXY STATEMENT OF ARCTURUS THERAPEUTICS LTD.
PROSPECTUS OF ARCTURUS THERAPEUTICS HOLDINGS INC.

Dear Shareholders of Arcturus Therapeutics Ltd.:

We are making this proxy statement/prospectus available in connection with the solicitation by the board of directors of Arcturus Therapeutics Ltd. ("**Arcturus-Israel**" or the "**Company**") of proxies to be voted at a shareholder meeting to be convened for the purposes set forth in the accompanying Notice of a Special Meeting of Arcturus' Shareholders.

The board of directors of Arcturus-Israel (the "**Board**") has approved the entry by Arcturus-Israel into an Agreement, dated as of February 8, 2019 (the "**Exchange Agreement**"), with a newly established Delaware corporation known as Arcturus Therapeutics Holdings Inc. and referred to herein as "**Arcturus-Delaware**") relating to the redomicile of Arcturus-Israel as a Delaware corporation. The Exchange Agreement provides for a statutory procedure under Sections 350-351 of the Israeli Companies Law, 5759-1999 (the "**Companies Law**") known as a Scheme of Arrangement (the "**Scheme of Arrangement**") to be implemented by Arcturus-Israel and Arcturus-Delaware, subject to approval of the District Court of the Tel-Aviv (the "**Israel Court**"). Pursuant to the Exchange Agreement and the Scheme of Arrangement, all issued ordinary shares and options to purchase ordinary shares in the capital of Arcturus-Israel as of immediately prior to the effective time of the Scheme of Arrangement will be exchanged by Arcturus-Delaware on a one-for-one basis in exchange for newly issued shares of common stock and options to purchase common stock, respectively, of Arcturus-Delaware, which will cause Arcturus-Israel to become a subsidiary of Arcturus-Delaware. In addition, Arcturus-Israel intends to transfer to Arcturus-Delaware, by way of a dividend distribution in kind, all of the shares of its wholly-owned subsidiary, Arcturus Therapeutics, Inc., a Delaware corporation ("**Private Arcturus**") so that Private Arcturus will then be a wholly-owned subsidiary of Arcturus-Delaware. The distribution may be executed, at any time close to or after the execution date of the transaction but no later than December 31, 2019, subject to Arcturus-Israel discretion, which can also elect not to execute such distribution.

While our incorporation in Israel has served us and our shareholders well, there are compelling reasons that support redomiciling to cause the parent company of our group to be an entity organized in the State of Delaware in the United States at this time. After considering various factors, the Board unanimously determined that restructuring our corporate group to cause the parent company of our group to be an entity incorporated in Delaware is in the best interests of the Company and its shareholders and will best help us accomplish our strategic objectives. All of Arcturus' employees and all of our operating assets are in the United States. Further, we believe that a significant majority of our shareholders are U.S.-based investors. In addition, our board of directors believes that our company will be more attractive as a potential acquisition candidate as a Delaware corporation. As a result, we think it makes sense to have our parent company based in the United States.

For you, our shareholders, much will remain unchanged following the time the Scheme of Arrangement comes into effect. There will be some differences in your shareholder rights, given the differences in the laws between Israel and Delaware. We have included a detailed chart outlining these differences in the attached proxy statement/prospectus in the section titled "Comparison of Rights of Israel Shareholders and Delaware Stockholders," which begins on page 76.

Just as is the case today with our ordinary shares, the shares of common stock of Arcturus-Delaware will trade on the NASDAQ Global Select Market ("**NASDAQ**"), under the symbol "ARCT." We will remain subject to the reporting requirements of the U.S. Securities and Exchange Commission (the "**SEC**"), the mandates of the Sarbanes-Oxley Act of 2002 and the corporate governance rules of NASDAQ. We will continue to report our consolidated financial results in U.S. dollars and under U.S. generally accepted accounting principles ("**U.S. GAAP**").

It is intended that holders of our ordinary shares and holders of options to purchase ordinary shares will not recognize any gain or loss for U.S. federal income tax purposes in connection with the transaction. With regard to Israeli capital gains taxation, in connection with the Exchange Agreement, Arcturus-Israel will seek a pre-ruling (the "Tax Ruling") on behalf of the Israeli tax resident Arcturus-Israel shareholders by the Israel Tax Authority

(the "ITA") regarding the capital gains taxation arrangements that shall apply in respect of a transfer of all ordinary shares of Arcturus-Israel in exchange for common stock of Arcturus-Delaware. It is expected that the Tax Ruling will find that capital gains taxation related to the Exchange will be deferred until a later disposition event and, as such, no tax will be due for Israeli tax resident Arcturus-Israel ordinary shareholders at the time of the Exchange. Non-Israeli tax resident shareholders are anticipated to be exempt from Israeli capital gains tax by virtue of Israeli tax law and/or the application of the appropriate income tax treaty. As such, the Tax Ruling will not address Arcturus-Israel shareholders which are not tax residents of Israel. It should be noted that the closing of the Transaction is not conditioned upon the receipt of an opinion or tax ruling from the ITA or the United States Internal Revenue Service ("IRS"). Please see "Taxation" for a description of the material U.S. federal income tax consequences and Israeli tax consequences of the Transaction to Arcturus-Israel ordinary shareholders. Determining the actual tax consequences of the Transaction to you may be complex and will depend on your specific situation. We urge you to consult your tax advisor for a full understanding of the tax consequences of the Transaction to you.

Holders of ordinary shares in the capital of Arcturus-Israel will be asked to vote on a proposal to approve the Scheme of Arrangement (the "**Arcturus Redomiciliation Proposal**") at an extraordinary general meeting of Arcturus-Israel's shareholders that has been directed to be convened by the Israel Court (the "**Special Meeting**") and is to be convened on , 2019, at 8:00 a.m. Pacific time. The Special Meeting will be held at . At the Special Meeting, Arcturus-Israel shareholders will be asked to approve the Arcturus Redomiciliation Proposal. After the approval by the Special Meeting, the Scheme of Arrangement will also require the approval of the Israel Court.

This proxy statement/prospectus provides you with detailed information regarding the transaction contemplated by the Arcturus Redomiciliation Proposal. We encourage you to read this entire document carefully. **You should carefully consider "Risk Factors" beginning on page 21 for a discussion of potential risks before voting**.

The Board has unanimously determined that the Scheme of Arrangement is advisable and in the best interests of Arcturus-Israel and its shareholders and recommends that Arcturus-Israel shareholders vote "FOR" the approval of the Arcturus Redomiciliation Proposal.

Please mark, date, sign and return the enclosed proxy card in the enclosed, postage-paid envelope as promptly as possible, as described in the attached proxy statement/prospectus, so that your shares may be represented at the Special Meeting and voted in accordance with your wishes. For detailed information regarding eligibility to vote at, and voting procedures for, the Special Meeting, please refer to "The Special Meeting—Record Date; Voting Rights; Votes Required for Approval" starting on page 94 of the accompanying proxy statement/prospectus.

If you have any questions about the meeting, or if you require assistance, please call .

Very truly yours,

JOSEPH E. PAYNE
President and Chief Executive Officer

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ARCTURUS THERAPEUTICS LTD.
(Incorporated under the Israeli Companies Law, 5759-1999)
(Company Registration Number 514098995)

NOTICE OF AN EXTRAORDINARY GENERAL MEETING OF ARCTURUS THERAPEUTICS LTD. SHAREHOLDERS ORDERED BY THE TEL-AVIV DISTRICT COURT,
TO BE HELD , 2019

In the Matter of Sections 350 and 351 of the
Israeli Companies Law, 5759-1999

Scheme of Arrangement

under Sections 350 and 351 of the Israeli Companies Law, 5759-1999

between

Arcturus Therapeutics Ltd., a public company limited by shares incorporated under Israeli Companies Law, 5759-1999 ("**Arcturus-Israel**"),

and

the Scheme Shareholders (as defined herein)

and

Arcturus Therapeutics Holdings Inc., a Delaware corporation ("**Arcturus-Delaware**")

NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that, the District Court of the Tel-Aviv (the "**Israel Court**") in a resolution dated March 13, 2019, has directed a Meeting to be convened of the Scheme Shareholders (as defined in the Schedule below) of Arcturus-Israel, and following that resolution, such Meeting shall be held at , on , 2019 at 8:00 a.m. Pacific time, for the purpose of considering and, if thought fit, approving (with or without modification) the following resolution:

> "That the Scheme of Arrangement proposed to be made pursuant to Sections 350 and 351 of the Israeli Companies Law, 5759-1999, between Arcturus-Israel (a public company limited by shares incorporated under the laws of the State of Israel), and the Scheme Shareholders, as described in the Notice convening this Meeting, be and is hereby approved."

The details and information regarding the Scheme of Arrangement are incorporated in the proxy statement/prospectus of which this Notice forms a part.

A Scheme Shareholder who was a shareholder of record of Arcturus-Israel as at , 2019, being the record date for the Meeting, may vote in person at the Meeting or may appoint one (and not more than one) person, whether a member of Arcturus-Israel or not, as his or her proxy to attend and vote in his or her stead.

A form of proxy applicable for the Meeting is enclosed with the proxy statement/prospectus of which this Notice forms a part.

It is requested that forms appointing proxies be lodged at Proxy Services, c/o Continental Stock Transfer & Trust, 1 State Street, 30th Floor, New York, NY 10004-1561, not less than 24 hours before the time appointed for holding the Meeting or such longer period as may be specified by the procedures of the participants of The Depository Trust Company.

In the case of joint Scheme Shareholders, any one of such persons may vote, but if more than one of such persons are present at the Meeting, the person whose name stands first on the Register of Members of Arcturus-Israel shall alone be entitled to vote.

In accordance with Arcturus-Israel's Articles of Association, Peter Farrell, Chairman of the Board of Directors will serve as chairperson of the Meeting. The Scheme of Arrangement will be subject, *inter alia*, to the subsequent approval of the Israel Court.

THE SCHEDULE

Expression	Meaning
"Scheme Shareholders"	(i) Persons who are registered as holders of ordinary shares in the capital of Arcturus-Israel in the Register of Members of Arcturus-Israel, other than CEDE & Co. ("**Registered Holders**"); and (ii) persons who are registered as holders of ordinary shares in the capital of Arcturus-Israel in book-entry form on the register of The Depository Trust Company, which shares are held through CEDE & Co. as the registered holder of the said Arcturus-Israel shares on the Register of Members of Arcturus-Israel ("**DTC Participants**").

Dated this , 2019

Neither the Securities and Exchange Commission nor any state securities commission, nor any securities regulatory authority in Israel, has approved or disapproved of the securities to be issued in connection with this transaction or determined if this proxy statement/prospectus is accurate or complete. Any representation to the contrary is a criminal offense.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements included in this proxy statement/prospectus and the documents incorporated by reference may include forward-looking statements (including within the meaning of Section 21E of the United States Securities Exchange Act of 1934, as amended, and Section 27A of the United States Securities Act of 1933, as amended), in particular, statements about Arcturus-Israel's expectations regarding the change of the parent company of the group from a Israel company to a Delaware corporation. These statements include, but are not limited to, statements that address Arcturus-Israel's expected future business and financial performance and statements about the proposed redomiciliation and other statements identified by words such as "will", "expect", "believe", "anticipate", "estimate", "should", "intend", "plan", "potential", "predict", "project", "aim", "assesses" and similar words, phrases or expressions. These forward-looking statements are based on current expectations and beliefs of the management of Arcturus-Israel, as well as assumptions made by, and information currently available to, such management, current market trends and market conditions and involve risks and uncertainties, many of which are outside Arcturus-Israel's and management's control, and which may cause actual results to differ materially from those contained in forward-looking statements. Accordingly, you should not place undue reliance on such statements. Unless the context otherwise requires, references in this proxy statement/prospectus to "the Company", "our Company", "we", "our", "us" and similar terms are to Arcturus-Delaware, whereas references to "Arcturus" are to Arcturus-Israel.

Particular uncertainties that could materially affect future results include risks associated with Arcturus' proposed redomiciliation, including the timing of the proposed redomiciliation and its ability to obtain shareholder and Israel court approvals and satisfy other closing conditions to the completion of the proposed redomiciliation

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are set forth in this proxy statement/prospectus, in particular in the section entitled "Risk Factors" and the documents that we file with the SEC. You may obtain copies of these documents as described under the heading "Where You Can Find More Information."

Except as required under U.S. federal securities laws and the rules and regulations of the SEC, we do not have any intention or obligation to update publicly any forward-looking statements after the distribution of this proxy statement/prospectus, whether as a result of new information, future events, changes in assumptions or otherwise.

STRUCTURE OF THE TRANSACTION

We are seeking your approval of the scheme of arrangement under sections 350-351 of the Israeli Companies Law, 5759-1999 (the "**Scheme of Arrangement**"), pursuant to which, upon effectiveness, a newly formed Delaware corporation will become the publicly traded parent of the Arcturus corporate group (the "**Arcturus group**"). In this proxy statement/prospectus, we refer to the transactions to be effected pursuant to the Scheme of Arrangement as the "**Transaction**." The Transaction will create a new publicly traded parent company of the Arcturus group that is incorporated in Delaware and will result in you holding shares of common stock of a Delaware corporation instead of ordinary shares of a Israel company.

Arcturus Therapeutics Ltd., a public company limited by shares incorporated under the laws of the State of Israel, whose shares you currently own ("**Arcturus-Israel**"), has formed a new Delaware corporation named Arcturus Therapeutics Holdings Inc. and referred to herein "**Arcturus-Delaware**"). Arcturus-Delaware has only nominal assets and capitalization and has not engaged in any business or other activities other than in connection with its formation and the Transaction.

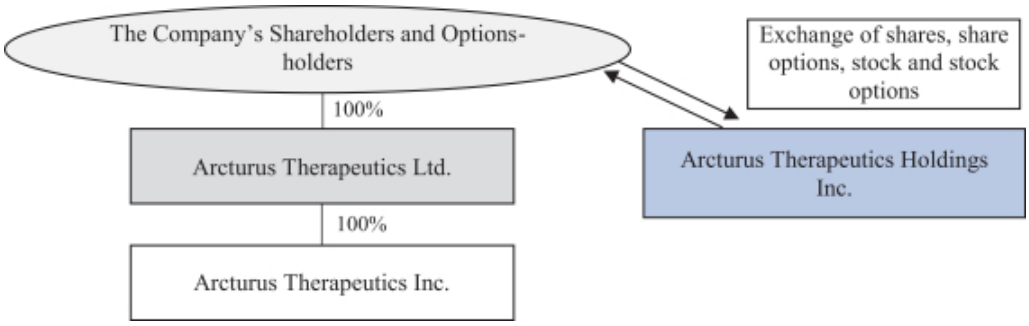
The Scheme of Arrangement will be effected pursuant to an agreement between Arcturus-Israel and Arcturus-Delaware, dated as of February 8, 2019, a copy of which is attached to this proxy statement/prospectus as Annex A (the "**Exchange Agreement**"). The Scheme of Arrangement provides for the exchange by Arcturus-Delaware of (i) your ordinary shares in the capital of Arcturus-Israel in exchange for shares of common stock of Arcturus-Delaware and (ii) your options to purchase ordinary shares in the capital of Arcturus-Israel in exchange for options to purchase common stock of Arcturus-Delaware, in each case on a one-for-one basis. As a result of the Transaction, the ordinary shareholders of Arcturus-Israel will become common stockholders of Arcturus-Delaware and such stockholders' rights will be governed by Delaware law and by Arcturus-Delaware's certificate of incorporation and bylaws, in substantially the forms attached hereto as Annex B and Annex C, respectively. In addition, under the Transaction, Arcturus-Israel intends to transfer, and no later than December 31, 2019 to Arcturus-Delaware by way of a dividend distribution in kind, all of the shares in Private Arcturus so that Private Arcturus will become a wholly-owned subsidiary of Arcturus-Delaware. This distribution may be executed, at any time close to or after the execution date of the transaction but no later than December 31, 2019, subject to Arcturus-Israel discretion, which can also elect not to execute such distribution.

The Company's position, based on its tax advisors, is that such distribution should be classified as capital redemption for Israeli tax purposes. In that case foreign residents will not be subject to any Israeli tax liability. Israeli residents will be subject to capital gains tax.

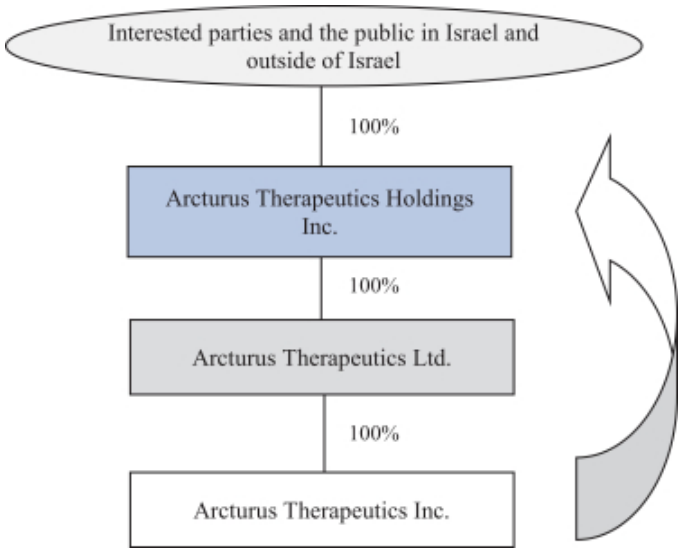
In addition, the Company's position, based on its tax advisors, is that the such distribution is not in breach of the Tax Ruling. The Company, based on its tax advisors, assesses, that its position will be accepted with more likely than not.

The following diagrams describe the stages of the Transaction and depict Arcturus' organizational structure after the Transaction.

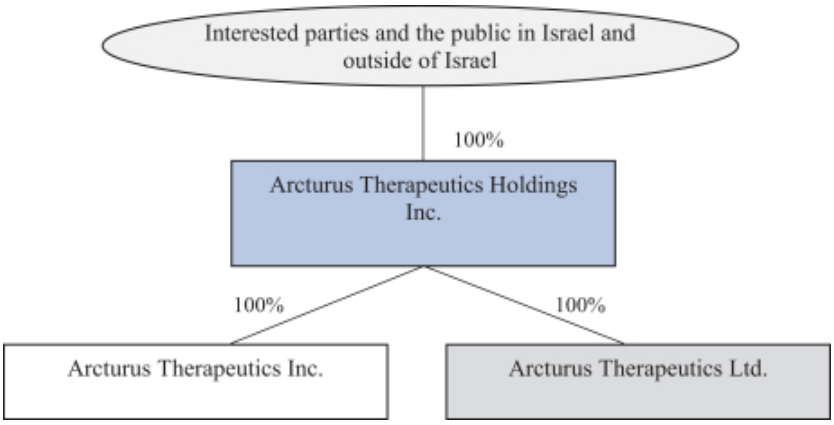
Stage One – transfer of ordinary shares and option to purchase ordinary shares of Arcturus-Israel from Arcturus-Israel to the Arcturus-Delaware in exchange for common stock and options to purchase common stock of the Arcturus-Delaware



Stage Two – transfer of the Arcturus Therapeutic Inc.'s (a subsidiary of Arcturus-Israel incorporated in Delaware) shares from Arcturus-Israel to Arcturus-Delaware:



The holding structure of the Arcturus-Delaware subsequent to the completion of the Transaction:



QUESTIONS AND ANSWERS ABOUT THE TRANSACTION AND THE SPECIAL MEETING

Q. What am I being asked to vote on at the Special Meeting?

A. Holders of ordinary shares of Arcturus-Israel are being asked to vote at a court-convened meeting of holders of ordinary shares of Arcturus-Israel (the "**Special Meeting**") on a proposal to approve the Scheme of Arrangement (the "**Arcturus Redomiciliation Proposal**"). If the Scheme of Arrangement becomes effective, the ordinary shares of Arcturus-Israel will be transferred to Arcturus-Delaware, which will issue one share of common stock of Arcturus-Delaware to the holders of Arcturus-Israel ordinary shares in exchange for each ordinary share of Arcturus-Israel that has been transferred. In addition, holders of options to purchase ordinary shares of Arcturus-Israel will receive new options to purchase the same amount of shares of common stock in Arcturus-Delaware, which will have substantially the same terms as the options to purchase ordinary shares of Arcturus-Israel, and the options to purchase ordinary shares in Arcturus-Israel will be cancelled. As a result, Arcturus-Delaware will become the parent company of Arcturus-Israel. In addition, as part of the Transaction, Arcturus-Israel will transfer to Arcturus-Delaware by way of a dividend in kind, all of its holdings of shares of Private Arcturus, so that Private Arcturus will become a wholly-owned subsidiary of Arcturus-Delaware. The distribution may be executed, at any time close to or after execution date of transaction, but no later than December 31, 2019, subject to Arcturus-Israel discretion which can also elect not to execute such distribution.

Q: Who can vote?

A: As confirmed by the Israel Court, holders of record of Arcturus-Israel ordinary shares on , 2019 (the "**Record Date**"), the record date for the Special Meeting, are entitled to vote. Our register of members will be available for inspection at least 10 days prior to the Special Meeting at . As of the Record Date, there were 10,761,523 ordinary shares in the capital of Arcturus-Israel outstanding and entitled to vote and we had shareholders of record. Each holder of Arcturus-Israel ordinary shares is entitled to one vote per share.

Q: What quorum and shareholder votes are required for action at the Special Meeting?

A: A quorum is required for the transaction of business at the Special Meeting. The presence, in person or by proxy, at the Special Meeting, of the Scheme Shareholders, as of the Record Date, of at least two Scheme Shareholders holding at least one-third of the voting rights (including presence by means of proxy or through a voting deed) within an hour from the time specified for the opening of the Special Meeting will constitute a quorum.

To be approved, the Arcturus Redomiciliation Proposal must receive the affirmative vote of 75% of the issued Arcturus-Israel ordinary shares held by the Scheme Shareholders present and voting, either in person or by proxy, at the Special Meeting.

Pursuant to the directions of the Israel Court, for the purposes of determining the number of Scheme Shareholders present and voting at the Special Meeting, Arcturus-Israel ordinary shares that are deposited in book-entry form with The Depository Trust Company ("**DTC**"), and registered in the name of CEDE & Co. ("**CEDE**") as nominee of DTC and holder of record in the Register of Members of Arcturus-Israel, will be treated as follows:

- CEDE shall be deemed not to be a shareholder of Arcturus-Israel; and
- each shareholder whose name appears on the register of DTC as a holder of Arcturus-Israel ordinary shares (a "**sub-depositor**") shall be deemed to be a Arcturus-Israel shareholder in respect of such number of Arcturus-Israel ordinary shares held in its account under CEDE.

Each sub-depositor need not vote the Arcturus-Israel ordinary shares registered in its name in the same way. Accordingly, a sub-depositor may:

- vote all or part of its Arcturus-Israel ordinary shares "FOR" the Arcturus Redomiciliation Proposal, which part shall be counted as approving the Arcturus Redomiciliation Proposal;

- vote all or part of its Arcturus-Israel ordinary shares "AGAINST" the Arcturus Redomiciliation Proposal, which part shall be counted as against approving the Arcturus Redomiciliation Proposal; and/or
- abstain from voting in respect of all or part of its Arcturus-Israel ordinary shares, which part shall not be counted in determining the Arcturus-Israel ordinary shares that are present and voting on the Arcturus Redomiciliation Proposal.

For purposes of determining whether the Arcturus Redomiciliation Proposal is approved by a majority in number of Scheme Shareholders, if the number of Arcturus-Israel ordinary shares voted "FOR" the Arcturus Redomiciliation Proposal by a sub-depositor exceeds the number of Arcturus-Israel ordinary shares voted "AGAINST" the Arcturus Redomiciliation Proposal by it, such sub-depositor will be taken to have voted "FOR" the Arcturus Redomiciliation Proposal, or if the number of Arcturus-Israel ordinary shares voted "AGAINST" the Arcturus Redomiciliation Proposal by a sub-depositor exceeds the number of Arcturus-Israel ordinary shares voted "FOR" the Arcturus Redomiciliation Proposal by it, such sub-depositor will be taken to have voted "AGAINST" the Arcturus Redomiciliation Proposal.

For the avoidance of doubt, a holder of Arcturus-Israel ordinary shares who is not a sub-depositor may only vote the Arcturus-Israel ordinary shares registered in its name in the same way, and must vote all or part of its Arcturus-Israel ordinary shares either "FOR" or "AGAINST" the Arcturus Redomiciliation Proposal, and not a mixture of both.

A holder of Arcturus-Israel ordinary shares (including a sub-depositor) voting by proxy shall be included in the count of Arcturus-Israel shareholders present and voting at the Special Meeting as if that Arcturus-Israel shareholder was voting in person, such that the votes of a proxy who has been appointed to represent more than one Arcturus-Israel shareholder at the Special Meeting shall be counted as the votes of such number of appointing Arcturus-Israel shareholders.

Each holder of Arcturus-Israel ordinary shares represented in person or by proxy at the Special Meeting is entitled to one vote per Arcturus-Israel ordinary share owned as of the Record Date.

Please see "The Special Meeting—Record Date; Voting Rights; Vote Required for Approval."

Q: What is the effect of broker non-votes and abstentions?

A: If a Scheme Shareholder abstains from voting, or if brokers holding their customers' shares of record cause abstentions to be recorded, those shares are considered present and entitled to be voted at the Special Meeting, and, therefore, are considered for purposes of determining whether a quorum is present. However, abstentions will not be counted in the tabulation of votes cast or shares voting on a proposal, and, thus, have no effect on whether a proposal has been approved. A broker "non-vote" is not counted for the purposes of determining whether a proposal has been approved. The Arcturus Redomiciliation Proposal is considered a "non-routine" matter, and if you are a "street name" holder, your broker will not have the authority to vote your shares for or against this proposal without your instruction.

Q. What vote does the board of directors recommend?

A. The Arcturus-Israel board of directors unanimously recommends that you vote "**FOR**" the Arcturus Redomiciliation Proposal.

Q. How do I attend the Special Meeting?

A. All shareholders of Arcturus-Israel, as of the Record Date, are invited to attend the Special Meeting at commencing at 8:00 a.m. Pacific time on , 2019.

If your shares are held in the name of a bank, broker or other holder of record and you plan to attend the Special Meeting, you must present proof of your beneficial ownership of shares, such as a bank or brokerage

account statement or letter from your bank, broker or other nominee showing that you owned Arcturus-Israel ordinary shares as of the record date, together with a form of personal identification and proof of address to be admitted to the Special Meeting.

Even if you establish proof of your beneficial ownership, you will not be entitled to vote at or otherwise participate in the Special Meeting unless you are a shareholder of record. Only shareholders, their proxy holders and Arcturus's guests may attend the Special Meeting.

Q. How do I vote?

A. Scheme Shareholders as of the Record Date may vote by personally attending the Special Meeting or attending by proxy, by completing and returning a proxy card.

If you hold your ordinary shares in "street name" through a broker, you will be able to exercise your vote through your broker by completing a voting instruction form. Most "street name" holders may also submit their voting instructions to their broker by telephone or by Internet. If shares are held in "street name," beneficial holders must follow the procedures provided by their broker to vote.

Q. Why do you want your ultimate parent company to be incorporated in Delaware rather than Israel?

A. We have been incorporated in Israel since 2008. While our incorporation in Israel has served us and our shareholders well, there are compelling reasons that support restructuring our corporate group to cause the parent company of our group to be an entity organized in the United States at this time. All of Arcturus' employees and all of our operating assets are in the United States. Further, we believe that a significant majority of our shareholders are U.S.-based investors. In addition, our board of directors believes that our company will be more attractive a potential acquisition candidate as a Delaware corporation. As a result, we think it makes sense to have our parent company based in the United States.

After considering various factors, our board of directors determined that it was advisable to proceed with the Transaction. Our board of directors' determination that Delaware is the preferred jurisdiction of incorporation of the parent of the Arcturus group was based on many factors, including the following:

- Delaware offers predictable and well-established corporate laws;
- Delaware has a well-developed legal system which we believe encourages high standards of corporate governance and provides stockholders with substantial rights;
- the perception of a Delaware corporation among regulatory authorities, investors and creditors as being highly favorable; and
- Delaware corporate law provides significant flexibility around corporate transactions, including the issuance of equity and the payment of dividends, while at the same time protecting the rights of stockholders.

Please see "The Arcturus Redomiciliation Proposal—Background and Reasons for the Transaction" for more information.

We cannot assure you that the anticipated benefits of the Transaction will be realized. In addition, despite the potential benefits described above, the Transaction will expose you and us to potential risks, including relating to future income tax policy in the United States. Please see the discussion under "Risk Factors."

Our board of directors has considered both the potential advantages of the Transaction and these potential risks and has unanimously approved the Scheme of Arrangement and recommends that shareholders vote for the approval of the Scheme of Arrangement.

Q: Are there any risks associated with the consummation of the Transaction?

A: While our board of directors has considered the potential risks to our shareholders and us associated with the Transaction and has recommended that shareholders vote for approval of the Arcturus Redomiciliation

Proposal, there are risks and we cannot assure you that the anticipated benefits of the Transaction will be realized. For example:

- your rights as a shareholder and optionholder will change due to differences between Israel and Delaware law and between the governing documents of Arcturus-Israel and Arcturus-Delaware; and
- the market for Arcturus-Delaware common stock may differ from the market for Arcturus-Israel ordinary shares.

You should consider these risks carefully. For additional information, please see the discussion under "Risk Factors."

Q. Will the Transaction affect Arcturus current or future day-to-day operations?

A. The Transaction will have no material impact on how we conduct our day-to-day operations.

Q: How will shares of Arcturus-Israel differ from shares of Arcturus-Delaware?

A: Arcturus-Delaware shares of common stock will be similar to Arcturus-Israel ordinary shares. However, there are differences between what your rights as a common stockholder will be under Delaware law and what they currently are as an ordinary shareholder under Israel law. In addition, there are differences between the organizational documents of Arcturus-Israel and Arcturus-Delaware.

We discuss these differences in detail under "Description of Arcturus-Delaware Capital Stock" and "Comparison of Rights of Israel Shareholders and Delaware Stockholders." Arcturus-Delaware's certificate of incorporation and bylaws in the form substantially as they will be in effect upon consummation of the Transaction, are attached as Annex C and Annex D, respectively, to this proxy statement/prospectus.

Q. Will the Transaction dilute my economic interest?

A. No, your fully-diluted relative economic ownership in Arcturus will not change as a result of the Transaction. Your ordinary shares and options to purchase ordinary shares of Arcturus-Israel will be purchased by Arcturus-Delaware on a one-to-one basis in exchange for shares of common stock and options to purchase common stock of Arcturus-Delaware.

Q. How will the Transaction affect Arcturus' financial reporting and the information Arcturus provides to its shareholders?

A. Upon completion of the Transaction, Arcturus-Delaware will be subject to the same reporting requirements of the SEC, the mandates of the Sarbanes-Oxley Act and the applicable corporate governance rules of NASDAQ as Arcturus-Israel before the Transaction, and Arcturus-Delaware will continue to report our consolidated financial results in U.S. dollars and in accordance with U.S. GAAP. Arcturus-Delaware will continue to file reports on Form 10-K, 10-Q and 8-K with the SEC and comply with the proxy rules applicable to domestic issuers, as we currently do. Arcturus-Delaware will also comply with any additional reporting requirements of Delaware law.

Q. What impact will the Transaction have on Arcturus' current debt arrangements?

A. We expect no material impact on our currently outstanding indebtedness.

Q. Will the Transaction impact Arcturus' ability to access the capital and bank markets in the future?

A. We believe that capital raising will be simpler and more efficient with a U.S. domiciled parent holding company.

Q. Will the Transaction be conditioned upon Arcturus' ability to complete any pending or proposed transactions?

A. No. The Transaction is not conditioned upon the completion of any other transaction.

Q. Will the Transaction have any impact on Arcturus' ability to pay dividends or, if it elects, to buy back shares?

A. In accordance with Delaware law, Arcturus-Delaware will be able to declare and pay dividends and buy back shares. Generally, we expect that Delaware law will be more flexible than Israel law as to these matters.

Q. Am I entitled to appraisal or dissenters' rights in the Transaction?

A. No. Once the Arcturus Redomiciliation Proposal is approved by the requisite Arcturus-Israel shareholders and by the Israel Court, the Scheme of Arrangement becomes effective and will be binding on all shareholders of Arcturus. Under Israel law, the ordinary shareholders of Arcturus-Israel do not have dissenters' rights or a right to an appraisal of the value of their shares or to receive payment for them in connection with the Transaction.

Q. Is the Transaction taxable to me under U.S. federal income tax law?

A. It is intended that holders of ordinary shares and options to purchase ordinary shares of Arcturus-Israel will not recognize gain or loss for U.S. federal income tax purposes in the Transaction but the closing of the Transaction is not conditioned upon the receipt of any opinion or tax ruling from the United States Internal Revenue Service ("**IRS**") to that effect. Please see "Material U.S. Federal Income Tax Considerations of the Transaction to Holders of Arcturus-Israel Ordinary Shares" for a description of the material U.S. federal income tax consequences of the Transaction to Arcturus-Israel ordinary shareholders. Determining the actual tax consequences of the Transaction to you may be complex and will depend on your specific situation. We urge you to consult your tax advisor for a full understanding of the tax consequences of the Transaction to you.

Q. When do you expect the Transaction to be completed?

A. Assuming the Scheme of Arrangement is approved by the requisite vote of Arcturus-Israel shareholders and by the Israel Court and the other conditions to the consummation of the Transaction are satisfied, we currently expect to complete the Transaction no later than , 2019. However, in accordance with the terms of the Exchange Agreement and subject to the paragraph below, Arcturus-Israel, without obtaining any further approval of Arcturus-Israel shareholders, may select the effective time of the Transaction (including the Scheme of Arrangement), provided the effective time occurs on or prior to May 31, 2019, unless such date is postponed to a later date by Arcturus-Israel and Arcturus-Delaware (the "**Long-Stop Date**"), notwithstanding Arcturus-Israel shareholder or Israel Court approval of the Scheme of Arrangement and/or the satisfaction of all of the other conditions to the Transaction. Please see "The Arcturus Redomiciliation Proposal—Effective Date of the Transaction."

Subject to the satisfaction of the conditions set forth in the Exchange Agreement, we are required to receive a Tax Ruling by the ITA by the Long-Stop Date. However, if the conditions set forth in the Exchange Agreement are not satisfied by such date, the Scheme of Arrangement will lapse pursuant to its terms and the Transaction will not be effected.

Q. What will I receive for my Arcturus-Israel ordinary shares and my options to purchase Arcturus-Israel ordinary shares?

A. You will receive one share of common stock of Arcturus-Delaware for each ordinary share of Arcturus-Israel and an option to purchase one share of Arcturus-Delaware common stock for each option you hold to purchase one share of Arcturus-Israel ordinary share you hold immediately prior to the completion of the Transaction.

Q. If the Scheme of Arrangement is approved, do I have to take any action to transfer my Arcturus-Israel ordinary shares or Arcturus options and receive Arcturus-Delaware shares of common stock and options to purchase Arcturus-Delaware shares of common stock?

A. Upon effectiveness of the Transaction, your Arcturus-Israel ordinary shares will be exchanged by Arcturus-Delaware for shares of common stock of Arcturus-Delaware and will be issued to you in uncertificated book-entry form. Arcturus-Israel share certificates outstanding immediately prior to the effective time of the Transaction will no longer be evidence of title of Arcturus-Israel ordinary shares represented by such certificates, and following the Transaction, will only represent the right to receive a corresponding number of uncertificated book-entry shares of common stock of Arcturus-Delaware. You will also receive new options to purchase shares of Arcturus-Delaware common stock in the same amount as your options to purchase ordinary shares of Arcturus-Israel and your options to purchase Arcturus-Israel ordinary shares will be cancelled. Our transfer agent will request that you return such stock certificates for cancellation, together with a properly completed and executed letter of transmittal, in exchange for shares of common stock of Arcturus-Delaware following completion of the Transaction. Arcturus-Israel ordinary shares held in "street name" through a bank, broker, custodian or other nominee will be automatically exchanged for uncertificated book-entry shares of common stock of Arcturus-Delaware without any action required on the part of the beneficial holder of such ordinary shares. Please see "The Arcturus Redomiciliation Proposal—Action Required to Transfer Arcturus-Israel Ordinary Shares and Receive Arcturus-Delaware Shares of Common Stock."

Q. Can I trade Arcturus-Israel ordinary shares between the date of this proxy statement/prospectus and the consummation of the Transaction?

A. Yes. Arcturus-Israel ordinary shares will continue to trade on NASDAQ under the symbol "ARCT" during this period.

Q. How will the Transaction affect the stock exchange listing of Arcturus-Israel ordinary shares?

A. There should be no disruption in the trading of your shares. We will submit a notification form with NASDAQ and expect that, following the consummation of the Transaction, the Arcturus-Delaware shares of common stock will be listed on NASDAQ under the symbol "ARCT," the same symbol under which your Arcturus-Israel ordinary shares are currently listed.

Q. If my Arcturus-Israel ordinary shares are held in "street name" by my broker, will my broker vote my shares for me?

A. No. The vote on the Arcturus Redomiciliation Proposal is considered a "non-routine" matter, and your broker cannot exercise discretion to vote your Arcturus-Israel ordinary shares. If you hold your Arcturus-Israel ordinary shares in "street name," you should follow the procedures provided by your broker regarding how to instruct your broker to vote your shares. Typically, you would submit your voting instructions by telephone or by the Internet in accordance with the procedures provided by your broker.

All shares entitled to vote and represented by properly completed proxies received prior to the Special Meeting and not revoked will be voted at the meeting in accordance with your instructions. If a signed proxy

card is returned without indicating how shares should be voted on a matter and the proxy is not revoked, the shares represented by such proxy will be voted as the Board recommends and, therefore, "FOR" the approval of the Arcturus Redomiciliation Proposal.

Q. May I revoke my proxy or change my vote?

A. Yes, Scheme Shareholders have the right to revoke a proxy at any time prior to voting at the Special Meeting by (i) submitting a subsequently dated proxy, which, if not delivered in person at the meeting, must be received by Arcturus-Israel no less than 24 hours before the appointed time of the meeting or (ii) by attending the meeting and voting in person, provided that you are a Scheme Shareholder. If you hold Arcturus-Israel ordinary shares in "street name" through a broker, you should follow the procedures provided by your broker to revoke or change your vote.

Q. Who is making and paying for this proxy solicitation?

A. The proxy is being solicited on behalf of the Board. The directors, officers and employees of Arcturus-Israel will solicit proxies by personal interview, mail, email, telephone, facsimile or other means of communication. These persons will not be paid additional remuneration for their efforts. Subject to applicable law, Arcturus-Israel may also reimburse brokerage houses and other custodians, nominees, and fiduciaries for their expenses for forwarding proxy materials to the beneficial owners of Arcturus-Israel ordinary shares and in obtaining voting instructions from such beneficial owners. The extent to which this will be necessary depends upon how promptly proxies are returned. We urge you to send in your proxy without delay.

Q. Whom should I call if I have questions about the Special Meeting or the Transaction?

A. You should contact us at:

Arcturus Therapeutics Ltd.
10628 Science Center Drive, Suite 250
San Diego, California 92121
(858) 900-2660

SUMMARY

This summary highlights selected information from this proxy statement/prospectus. It does not contain all of the information that is important to you. To understand the Transaction more fully, and for a more complete legal description of the Transaction, you should read carefully the entire proxy statement/prospectus, including the Annexes. The Exchange Agreement, substantially in the forms attached as Annex A to this proxy statement/prospectus, is the legal document that govern the Transaction. The certificate of incorporation and bylaws of Arcturus-Delaware, substantially in the forms attached as Annex B and Annex C, respectively, to this proxy statement/prospectus, will become the governing documents of Arcturus-Delaware upon the completion of the Transaction. We encourage you to read those documents carefully.

Parties to the Transaction

Arcturus-Israel. We are a public company limited by shares incorporated under the laws of the State of Israel focused on RNA medicines with enabling technologies—UNA Oligomer chemistry and LUNAR® lipid-mediated delivery. Our diverse pipeline of RNA therapeutics includes programs pursuing rare diseases, Hepatitis B, non-alcoholic steatohepatitis (NASH), cystic fibrosis, and vaccines. Our versatile RNA therapeutics platforms can be applied toward multiple types of RNA medicines including small interfering RNA, messenger RNA, replicon RNA, antisense RNA, microRNA and gene editing therapeutics. Arcturus owns LUNAR lipid-mediated delivery and Unlocked Nucleomonomer Agent (UNA) technology including UNA Oligomers, which are covered by our extensive patent portfolio (140 patents and patent applications, issued in the U.S., Europe, Japan, China and other countries). Our ordinary shares are traded on NASDAQ under the symbol “ARCT.”

Arcturus-Delaware. Arcturus-Delaware is a newly formed Delaware corporation that was incorporated by Arcturus-Israel. Arcturus-Delaware has only nominal assets and capitalization and has not engaged in any business or other activities other than in connection with its formation and the Transaction. Immediately following the Transaction, Arcturus-Delaware will become the ultimate parent company of the Arcturus group.

The principal executive offices of Arcturus-Israel are located at 10628 Science Center Drive, Suite 200, San Diego, CA 92121, USA. The telephone number of each party at that address is (858) 900-2660. The principal offices of Arcturus-Delaware is located at 10628 Science Center Drive, Suite 250, San Diego, CA 92121, USA, and the telephone number at that address is (858) 900-2660.

The Transaction

The Transaction will cause the parent company of our corporate group to be a Delaware corporation.

On February 8, 2019, the board of directors of Arcturus-Israel approved the Transaction and the entry by Arcturus-Israel into the Exchange Agreement. On February 11, 2019, we submitted the Israel Court, with a request according to sections 350-351 of the Companies Law, to order, the convening of the Special Meeting to approve the Scheme of Arrangement. We will hold the Special Meeting to approve the Scheme of Arrangement on , 2019. If we obtain the necessary shareholder approvals, we will request the Israel Court to approve the Scheme of Arrangement. Assuming we receive the necessary approvals of the Scheme of Arrangement from Israel’s shareholders and the Israel Court and the other conditions to consummate the Transaction are satisfied, on or prior to the Long-Stop Date, at which time the Scheme of Arrangement will become effective and binding in accordance with its terms and conditions.

As a result of the Transaction, the ordinary shareholders of Arcturus-Israel will become stockholders of Arcturus-Delaware, holders of options to purchase Arcturus-Israel ordinary shares will hold options to purchase common stock of Arcturus-Delaware and such stockholders’ and optionholders’ rights will be governed by

Delaware law and Arcturus-Delaware's certificate of incorporation and bylaws, in substantially the forms attached hereto as Annex B and Annex C, respectively. In addition, in connection with the Transaction, Arcturus-Israel intends to transfer to Arcturus-Delaware by way of a dividend distribution in kind, all of its holdings in Private Arcturus, so that Private Arcturus will become a wholly-owned subsidiary of Arcturus-Delaware. The distribution may be executed, at any time close to or after the execution date of the transaction, but no later than December 31, 2019, subject to Arcturus-issued discretion which can also elect not to execute such distribution.

Background and Reasons for the Transaction

On November 15, 2017, our predecessor company, Alcobra Ltd. ("**Alcobra**"), now named Arcturus Therapeutics Ltd., completed its **merger** with Arcturus Therapeutics, Inc. ("**Private Arcturus**"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of September 27, 2017, among Alcobra, Aleph MergerSub, Inc. and Private Arcturus (as amended, the "**merger agreement**"). In connection with the merger, Alcobra agreed to acquire all of the outstanding common stock of Private Arcturus in exchange for issuing to the Private Arcturus stockholders an aggregate 6,631,712 of Alcobra's ordinary shares, par value 0.07 NIS per share, after giving effect to a 1-for-7 reverse split effected immediately prior to the merger. As a result of the merger, Private Arcturus became a wholly-owned subsidiary of Alcobra. While Alcobra was the legal acquirer in the transaction, Private Arcturus was deemed the accounting acquirer. Immediately after giving effect to the merger, on November 15, 2017, Alcobra changed its name to Arcturus Therapeutics Ltd.

Therefore, we have been incorporated in Israel since February 7, 2008. While our incorporation in Israel has served us and our shareholders well, there are compelling reasons that support restructuring our corporate group to cause the parent company of our group to be an entity organized in the United States at this time.

Our operations are focused in the United States, and we expect to continue to invest in our operations in the United States. All of Arcturus' employees and our operating assets are in the United States. Further, we believe that a significant majority of our shareholders are U.S.-based investors. In addition, our board of directors believe we will be more attractive as an acquisition candidate (should any such opportunity arise in the future) as a Delaware corporation. As a result, we think it makes sense to have our parent company based in the United States.

Following a thorough review, we have determined that having our ultimate parent company incorporated in the United States will increase our opportunities for growth and shareholder value creation and is best for us, our shareholders and our employees.

After considering various factors, our board of directors determined that it was advisable to proceed with the Transaction. Our board of directors' determination that Delaware is the preferred choice for the domicile of the parent of the Arcturus group was based on many factors, including the following:

- Delaware offers predictable and well-established corporate laws;
- Delaware has a well-developed legal system which we believe encourages high standards of corporate governance and provides stockholders with substantial rights;
- the perception of a Delaware corporation among regulatory authorities, investors and creditors is highly favorable; and
- Delaware corporate law provides significant flexibility around corporate transactions, including the issuance of equity and the payment of dividends, while at the same time protecting the rights of stockholders.

We cannot assure you that the anticipated benefits of the Transaction will be realized. In addition, despite the potential benefits described above, the Transaction will expose you and us to potential risks, including relating to future income tax policy in the United States. Please see the discussion under "Risk Factors."

The Board has considered both the potential advantages of the Transaction and these potential risks and has unanimously approved the Scheme of Arrangement and recommends that shareholders vote for the approval of the Scheme of Arrangement.

Potential Tax Consequences to the Arcturus Group

The United States corporate income tax regime (including applicable statutory tax rates) changed significantly due to the enactment of the 2017 legislation commonly referred to as the "Tax Cuts and Jobs Act.". There is significant uncertainty as to how the Tax Cuts and Jobs Act will be implemented from an accounting standpoint. Arcturus Therapeutics, Ltd. is currently subject to both Israel and U.S. taxes on a certain portion of income. This is as a result of the form of the transaction undertaken on November 15, 2017, which required, for U.S. federal income tax purposes, that Arcturus Therapeutics, Ltd. is treated as a US incorporated entity for purposes of the U.S. Internal Revenue Code. Following the redomiciliation, the new Delaware incorporated publicly traded parent should no longer be subject to Israeli tax, provided it is managed and controlled in the US.

U.S. Federal Income Tax Considerations to Holders of Arcturus-Israel Ordinary Shares and Holders of Options to acquire Arcturus-Israel Ordinary Shares

It is intended that holders of ordinary shares of Arcturus-Israel and options to purchase ordinary shares of Arcturus-Israel will not recognize any gain or loss for U.S. federal income tax purposes on the Transaction but the closing of the Transaction is not conditioned upon the receipt of any opinion or tax ruling from the IRS to that effect. Please refer to "Material U.S. Federal Income Tax Considerations of the Transaction to Holders of Arcturus-Israel Ordinary Shares and Holders of Options to Purchase Arcturus-Israel Ordinary Shares" for a description of material U.S. federal income tax consequences of the Transaction to Arcturus-Israel ordinary shareholders and option holders. Determining the actual tax consequences of the Transaction to you may be complex and will depend on your specific situation. We urge you to consult your tax advisor for a full understanding of the tax consequences of the Transaction to you.

CERTAIN MATERIAL ISRAELI TAX CONSEQUENCES OF THE TRANSACTION

Material Israeli Tax Consequences

The following is a summary discussion of certain Israeli tax considerations in connection with the Transaction. The following summary is included for general information purposes only and is based upon current Israeli tax law. No assurance can be given that new or future legislation, regulations, or interpretations will not significantly change the tax considerations described below, or that any such change may apply retroactively. This summary does not discuss all the material aspects of Israeli tax consequences that may apply to certain holders of Arcturus-Israel ordinary shares in light of their particular circumstances, such as investors that do not hold their Arcturus-Israel ordinary shares as a capital asset, investors that are subject to special tax rules, or other investors referred to below.

Tax matters are very complicated, and the Israeli tax consequences of the Transaction for Israeli shareholders of Arcturus-Israel will depend on their particular situation. You are encouraged to consult your tax advisors regarding the specific Israeli tax consequences of the Transaction applicable to you, including tax return reporting requirements; the applicability of federal, state, local, and foreign tax laws; and the effect of any proposed change in the tax laws. This discussion is not intended to be a complete analysis or description of all potential tax consequences of the Transaction.

Israeli law imposes a capital gains tax on the sale of capital assets by Israeli residents and on the sale of Israeli assets or assets deemed to be located in Israel by non-residents of Israel. In general, under the Israeli Tax Ordinance, the transfer by shareholders of Arcturus-Israel of ordinary shares to Arcturus-Delaware is deemed to be a sale of capital assets and therefore gives rise to a taxable event. Consequently, unless a specific exemption is available, either under the Israeli Tax Ordinance or a treaty for the avoidance of double taxation applicable to non-residents of Israel, the exchange of shares will be subject to tax in Israel.

Under the Israeli Tax Ordinance, the tax rate applicable to capital gains derived from the disposition of Arcturus-Israel ordinary shares in the Transaction is 25% for Israeli individuals (or 30% in case of a shareholder who claims a deduction for financing expenses in connection with such shares or who is considered a “Significant Shareholder” at any time during the 12-month period preceding such disposition, i.e. such shareholder alone or together with such person’s relative or another person who collaborates with such person on a permanent basis holds, directly or indirectly, at least 10% of any “means of control” in the company in question). In addition, an individual may be subject to an “Additional Tax” at the rate of 3% on his income exceeding NIS 649,560 (in 2019). However, the foregoing tax rates will not apply to individuals who (i) are dealers in securities and/or (ii) acquired their shares prior to an initial public offering (and may be subject to a different tax arrangement). A corporate shareholder is generally subject to tax at the Israeli corporate tax rate, which is 23% in 2019.

According to the Israeli Tax Ordinance, non-Israeli residents should be exempt from Israeli capital gains tax on any gains derived from the sale of their Arcturus-Israel ordinary shares pursuant to the Transaction, provided that (i) they purchased the Arcturus-Israel ordinary shares upon or after Arcturus-Israel’s initial public offering in August 2013, (ii) such gains are not derived from a permanent establishment of such shareholders in Israel, and (iii) they obtained an exemption certificate from the Israel Tax Authority. However, a non-Israeli corporate shareholder will not be entitled to such exemption if Israeli residents (i) have, directly or indirectly, a controlling interest of more than 25% in such non-Israeli corporation, whether directly or indirectly, by themselves or with others; or (ii) are the beneficiaries of or are entitled to 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly.

In addition, under the US-Israel Tax Treaty (the “Treaty”), the sale, exchange, or other disposition of Arcturus-Israel ordinary shares by a person who (i) holds the ordinary shares as a capital asset, (ii) qualifies as a

resident of the United States within the meaning of the Treaty, and (iii) is entitled to claim the benefits afforded to such resident by the Treaty (such person being referred to herein as a "Treaty US Resident") should generally be exempt from Israeli capital gain tax. Such exemption will not apply if (i) such Treaty US Resident is an individual who was present in Israel for a period or periods aggregating 183 days or more during the relevant taxable year; (ii) such Treaty US Resident held, directly or indirectly, shares representing 10% or more of the voting rights of a company during any part of the 12-month period preceding such sale, exchange, or disposition, subject to certain conditions; (iii) the gain arising from such sale, exchange, or disposition can be attributable to a permanent establishment of the shareholder maintained in Israel, subject to certain conditions; (iv) the capital gains arising from such sale, exchange, or disposition are attributed to real estate located in Israel; or (v) the capital gains arising from such sale, exchange, or disposition are attributed to royalties. In each case, the sale, exchange, or disposition of Arcturus-Israel ordinary shares would be subject to Israeli tax, to the extent applicable. However, under the Treaty, such Treaty US Resident would be permitted to claim a credit for such taxes against the US federal income tax imposed with respect to such sale, exchange, or disposition, under the circumstances and subject to the limitations of the Treaty or the US laws applicable to foreign tax credits.

The Tax Ruling

In connection with the Exchange Agreement and the Arcturus Redomiciliation Proposal, Arcturus-Israel has filed, on behalf of its shareholders, an application for a Tax Ruling with the Israel Tax Authority, applicable for shareholders not otherwise exempt from Israeli tax on the Transaction, to treat the Transaction as a tax-deferred transaction for the purposes of Israeli tax laws, in accordance with Section 104H of the Israeli Tax Ordinance.

The Tax Ruling application details the proposed restructure in several steps to be executed simultaneously, as follows:

1. Arcturus-Delaware will be incorporated as a US-resident entity.
2. Arcturus-Israel's shareholders will transfer their holding in Arcturus-Israel to Arcturus-Delaware in exchange for shares issued in Arcturus-Delaware, which will eventually become a listed company.
    a. The non-Israeli resident shareholders will transfer their shares in a tax exempt event in accordance with Section 97(b3) of the Israeli Tax Ordinance.
    b. The Israeli resident shareholders will transfer their shares as a tax-deferred transaction in accordance with Section 104H of the Israeli Tax Ordinance.
3. Arcturus-Israel will distribute Private Arcturus shares as a dividend in kind to Arcturus-Delaware, in a taxable event.

The Tax Ruling application requests to approve that the exchange of Arcturus-Israel ordinary shares by Israeli resident shareholders for shares issued in Arcturus-Delaware (as detailed in subsection 2(b) above) shall not be treated as a "sale" pursuant to Section E of the Israeli Tax Ordinance on the date of the share exchange, but rather will be considered a tax-deferred transaction until the actual sale of the shares issued in Arcturus-Delaware, all in accordance with the provisions and terms to be determined within the Tax Ruling. (Additional exemptions were also requested in the Tax Ruling application regarding certain provision of Section 104H.)

Nevertheless, the Tax Ruling application does not request to rule either in regard to the tax exemption for non-Israeli resident shareholders under Section 97(b3) of the Israeli Tax Ordinance (as detailed in subsection 2(a) above), or in regard to the Private Arcturus shares' distribution as a dividend in kind to Arcturus-Delaware (as detailed in subsection 3 above). Therefore, the Tax Ruling will not make a ruling on such matters. However, it should be emphasized that regardless of the Tax Ruling, the Private Arcturus shares' distribution as a dividend in kind to Arcturus-Delaware will be executed as a taxable event and may have withholding tax implications on Arcturus-Israel (as a distributer).

NOTE THAT THERE IS NO ASSURANCE THAT SUCH TAX RULING WILL BE OBTAINED FROM THE ISRAEL TAX AUTHORITY PRIOR TO THE CONSUMMATION OF THE TRANSACTION, NOR THAT, IF IT IS OBTAINED, IT WILL PROVIDE THE FOREGOING. IF SUCH TAX RULING IS NOT OBTAINED PRIOR TO SUCH TIME, AND STILL THE RESTRUCTURE SHALL OCCUR, TAX SHALL BE WITHHELD FROM THE CONSIDERATION PAYABLE FOR EACH ARCTURUS-ISRAEL ORDINARY SHARE AT A RATE OF TWENTY FIVE (25) PERCENT OR IN ACCORDANCE WITH OTHER INSTRUCTIONS PROVIDED BY THE ISRAEL TAX AUTHORITY. IF SUCH TAX RULING PROVIDES OTHER INSTRUCTIONS THAN THOSE DESCRIBED ABOVE, ARCTURUS-DELAWARE SHALL COMPLY WITH SUCH TAX RULING.

Comparison of Rights

Many of the principal attributes of Arcturus-Israel's ordinary shares and Arcturus-Delaware's shares of common stock will be similar. However, there are differences between what your rights will be under Delaware law and what they currently are under Israel law. In addition, there are differences between Arcturus-Israel's constitution and Arcturus-Delaware's certificate of incorporation and bylaws as they will be in effect upon the completion of the Transaction.

We discuss these differences under "Description of Arcturus-Delaware Capital Stock" and "Comparison of Rights of Israel Shareholders and Delaware Stockholders." Arcturus-Delaware's certificate of incorporation and bylaws, in the form substantially as they will be in effect upon completion of the Transaction, are attached as Annex B and Annex C, respectively, to this proxy statement/prospectus.

Stock Exchange Listing

We will submit a notification form with NASDAQ and expect that, upon the consummation of the Transaction, Arcturus-Delaware shares of common stock will be listed on NASDAQ under the symbol "ARCT," the same symbol under which your Arcturus-Israel ordinary shares are currently listed.

Approval of the Scheme of Arrangement by the Israel Court

Arcturus-Israel has made an application to the Israel Court for an order to convene the Special Meeting, and such application was approved on March 13, 2019. Subsequent and subject to approval of the Arcturus Redomiciliation Proposal by the requisite Arcturus-Israel shareholders, Arcturus-Israel must then apply to the Israel Court for the Israel Court Order. If (i) the Israel Court Order is granted, and (ii) the conditions to closing contained in the Exchange Agreement are satisfied, the Scheme of Arrangement will become effective.

The approval by the shareholders of Arcturus-Israel and/or the Israel Court of the Scheme of Arrangement shall remain valid notwithstanding any change in the business or financial condition of, or any transactions undertaken by us.

Amendment

The Scheme of Arrangement may be amended, modified or supplemented at any time before or after its approval by the shareholders of Arcturus-Israel at the Special Meeting. However, after approval, no amendment, modification or supplement may be made or effected that legally requires further approval by Arcturus-Israel shareholders without obtaining such approval.

Effective Date of the Transaction

In accordance with the terms of the Exchange Agreement, Arcturus-Israel shall file an application on behalf of its shareholders with the ITA in order to receive the Tax Ruling.

If the conditions set forth in the Exchange Agreement are not satisfied by the Long Stop Date, the Scheme of Arrangement will lapse pursuant to its terms and the Transaction will not be effected.

Accounting Treatment of the Transaction

Under U.S. GAAP, the Scheme of Arrangement represents a transaction between entities under common control. Assets and liabilities are transferred at carrying value between entities under common control. Accordingly, the assets and liabilities of Arcturus-Delaware will be reflected at the same carrying amounts as in the accounts of Arcturus-Israel at the effective time of the Scheme of Arrangement.

Special Meeting

Time, Place, Date and Purpose.

The Special Meeting will be held on , 2019 at 8:00 a.m. Pacific time at .

At the Special Meeting, Arcturus-Israel's board of directors will ask the holders of ordinary shares in the capital of Arcturus-Israel to vote to approve the Scheme of Arrangement. If the Scheme of Arrangement is approved and becomes effective, it will effect the Transaction, pursuant to which your ordinary shares of Arcturus-Israel will be transferred to Arcturus-Delaware and you will receive, on a one-for-one basis, new shares of common stock of Arcturus-Delaware in exchange for each ordinary share of Arcturus-Israel that has been transferred and your options to purchase ordinary shares of Arcturus-Israel will be cancelled and you will be granted new options to purchase common stock of Arcturus-Delaware in exchange for each option to purchase ordinary shares of Arcturus-Israel that you currently hold.

Record Date.

The Record Date for determining the Scheme Shareholders who are entitled to vote at the Special Meeting is , 2019.

Recommendation of the Board of Directors

The Arcturus-Israel board of directors unanimously recommends that Arcturus-Israel shareholders vote "FOR" the Arcturus Redomiciliation Proposal.

Quorum and Required Vote

A quorum is required for the transaction of business at the Special Meeting. The presence, in person or by proxy, at the Special Meeting of the Scheme Shareholders as of the Record Date of at least two Scheme Shareholders holding at least one-third of the voting rights (including presence by means of proxy or through a voting deed) within an hour from the time specified for the opening of the Special Meeting. will constitute a quorum.

To be approved, the Arcturus Redomiciliation Proposal must receive the affirmative vote of 75% of the issued Arcturus-Israel ordinary shares held by the Scheme Shareholders present and voting, either in person or by proxy, at the Special Meeting.

Each holder of Arcturus-Israel ordinary shares represented in person or by proxy at the Special Meeting is entitled to one vote per Arcturus-Israel ordinary share owned as of the Record Date.

As of , 2019, the Record Date, there were ordinary shares and in the capital of Arcturus-Israel outstanding and we had shareholders of record.

Summary Financial Data

The following tables set forth the selected historical consolidated financial data for Arcturus-Israel for each of the fiscal years ended December 31, 2014-December 31, 2018 (although December 31, 2014 is unaudited).

The selected historical financial data below should be read in conjunction with the consolidated financial statements and their accompanying notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained herein. Historical financial information may not be indicative of Arcturus-Delaware's future performance.

We have included no data for Arcturus-Delaware because this entity was incorporated on , 2019 and was not in existence during any of the periods shown below (in thousands):

	For the year ended December 31,				
	2018	2017	2016	2015	2014 (Unaudited)
Collaboration revenue	$ 15,753	$ 12,998	$20,382	$ 6,138	$ 25
Research and development, net	16,982	15,918	17,934	5,476	3,975
General and administrative	20,582	7,572	3,448	2,574	2,027
Net loss from operations	(21,811)	(10,492)	(1,000)	(1,912)	(5,977)
Net loss	(21,785)	(10,902)	(1,571)	(1,902)	(6,018)
Net loss per share, basic and diluted	$ (2.16)	$ (3.53)	$ (0.77)	$ (0.94)	$ (2.99)
Weighted-average shares outstanding, basic and diluted	10,069	3,087	2,032	2,016	2,015

	2018	2017	2016	2015	2014 (Unaudited)
Working capital	$ 29,251	$ 39,662	$ 3,597	$ 1,208	$ 1,416
Total assets	$ 44,198	$ 52,024	$13,736	$14,947	$ 2,895
Shareholders' equity (deficit)	$ 13,642	$ 33,794	$ 1,577	$ (3,631)	$ (1,845)

Market Price and Dividend Policy

Arcturus-Israel ordinary shares are traded on NASDAQ under the symbol "ARCT." As of , 2019, the Record Date, we had record holders of our ordinary shares. The high and low sales price per ordinary share and the dividend paid per ordinary share for the following periods were as follows:

Our Ordinary Shares have been listed on the NASDAQ Global Market under the symbol "ARCT" since November 15, 2017. Previously, our Ordinary Shares were listed on the NASDAQ Global Market under the symbol "ADHD" beginning May 22, 2013 and beginning on March 28, 2014 our Ordinary Shares were listed on the NASDAQ Global Market under the symbol "ADHD." to Prior to May 22, 2013, there was no public trading

market for our Ordinary Shares. Our initial public offering was priced at $8.00 per share on May 21, 2013. The following table sets forth for the periods indicated the high and low sales prices per ordinary share as reported on the NASDAQ Capital Market and the NASDAQ Global Market:

Annual Information:	Low	High
2013	$6.50	26.96
2014	3.12	25.44
2015	3.68	9.50
2016	1.77	6.50
Quarterly Information		
First Quarter 2015	$3.68	8.30
Second Quarter 2015	5.38	8.84
Third Quarter 2015	5.61	9.50
Fourth Quarter 2015	5.28	8.78
First Quarter 2016	3.15	6.50
Second Quarter 2016	3.61	5.75
Third Quarter 2016	1.95	5.36
Fourth Quarter 2016	1.77	2.90
First Quarter 2017	$5.81	18.04
Second Quarter 2017	7.07	9.31
Third Quarter 2017	6.52	8.75
Fourth Quarter 2017	6.72	15.19
First Quarter 2018	4.78	10.45
Second Quarter 2018	4.90	9.56
Third Quarter 2018	7.11	10.00
Fourth Quarter 2018	4.11	9.25
First Quarter 2019	4.26	5.79

On , 2019, the most recent practicable date before the date of this proxy statement/prospectus, the closing price of the Arcturus-Israel ordinary shares on NASDAQ was $ per share.

Dividend Policy

We have not paid cash dividends on our common stock since our inception and we do not contemplate paying dividends in the foreseeable future.

RISK FACTORS

Before you decide how to vote, you should consider carefully the following risk factors in addition to the other information contained in this proxy statement/prospectus.

RISKS RELATING TO THE TRANSACTION

Your rights as a shareholder will change as a result of the Transaction.

Due to the differences between Delaware law and Israel law and differences between the governing documents of Arcturus-Delaware and Arcturus-Israel, we are unable to adopt governing documents for Arcturus-Delaware that are identical to the governing documents for Arcturus-Israel. We have sought to preserve in the certificate of incorporation and bylaws of Arcturus-Delaware a similar allocation of rights and powers between the shareholders and our board of directors that exists under Arcturus-Israel's articles of association and Israel Law. Nevertheless, Arcturus-Delaware's proposed certificate of incorporation and bylaws differ from Arcturus-Israel's articles of association, both in form and substance, and your rights as a shareholder will change.

For a description of these differences, please see the comparison chart of your rights as an ordinary shareholder of Arcturus-Israel against your rights as a common stockholder of Arcturus-Delaware, located in "Comparison of Rights of Israel Shareholders and Delaware Stockholders."

The effective time of the Transaction is subject to change.

Under the terms of the Exchange Agreement, once the Scheme Shareholders and the Israel Court have approved (in that order) the Scheme of Arrangement, Arcturus-Israel, without obtaining any further approval of its shareholders, may select the effective time of the Transaction (including the Scheme of Arrangement), provided the effective time occurs on or before the Long-Stop Date. We intend to implement the Transaction at a time that is beneficial to Arcturus and its shareholders.

The expected benefits of the Transaction may not be realized.

There can be no assurance that all of the anticipated benefits of the Transaction will be achievable, particularly as the achievement of the benefits are in many important respects subject to factors that we do not and cannot control, including the reaction of investors and of third parties with whom we enter into contracts and otherwise transact business.

The Transaction will result in additional direct and indirect costs, even if it is not completed.

We will incur additional costs as a result of the Transaction. We expect to incur attorneys' fees, accountants' fees, filing and other regulatory fees, mailing expenses, proxy solicitation fees and financial printing expenses in connection with the Transaction, even if the Scheme of Arrangement is not approved or completed. The Transaction also may negatively affect us by diverting attention of our management and employees from our operating business during the period of implementation and by increasing other administrative costs and expenses.

RISKS RELATED TO OUR FINANCIAL CONDITION AND NEED FOR ADDITIONAL CAPITAL

Our auditor's report includes a going concern paragraph.

Our auditor's report on our financial statements for the year ended December 31, 2018 includes a going concern paragraph. The Company's products that are being developed have not generated significant revenue. As a result, the Company has suffered recurring losses and requires significant cash resources to execute its business plans. These losses are expected to continue for an extended period of time. The aforementioned factors raise substantial doubt about the Company's ability to continue as a going concern within one year from the date of filing. The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of asset amounts or the classification of liabilities that might be necessary should the Company be unable to continue as a going concern within one year after the date the financial statements are issued.

Historically, the major source of our cash has been from proceeds from various public and private offerings of ordinary shares, debt issuances and through collaboration agreements. Management's plans to mitigate an expected shortfall of capital and to support future operations, include raising additional funds. The actual amount of cash that it will need to operate is subject to many factors.

The Company also recognizes it will need to raise additional capital in order to continue to execute its business plan in the future. There is no assurance that additional financing will be available when needed or that management will be able to obtain financing on terms acceptable to the Company or that the Company will become profitable and generate positive operating cash flow. If the Company is unable to raise sufficient additional funds, it will have to scale back its operations.

We have a limited operating history, have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future.

We are a preclinical nucleic acid medicines company with a limited operating history. Since inception, our operations have been primarily limited to acquiring and licensing intellectual property rights, developing our nucleic acid product platform, undertaking basic research around nucleic acid targets and conducting preclinical studies for our initial programs. We have not yet obtained regulatory approval for any product candidates. Consequently, any predictions about our future success or viability, or any evaluation of our business and prospects, may not be accurate.

We have incurred losses in each year since our inception. Our net losses were $21.8 million and $10.9 million for the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018, we had an accumulated deficit of $44.9 million.

We have devoted most of our financial resources to research and development, including our preclinical development activities. To date, we have funded our operations primarily through upfront payments, research funding and milestones from strategic alliances and collaborations, and through the sale of equity and convertible securities. We expect to continue to incur substantial and increased expenses, losses and negative cash flows as we expand our development activities and advance our preclinical programs. If our product candidates are not successfully developed or commercialized, including because of a lack of capital, or if we do not generate enough revenue following marketing approval, we will not achieve profitability and our business may fail. Even if we or our strategic alliance partners successfully obtain regulatory approval to market a product candidate, our revenues will also depend upon the size of any markets in which our product candidates have received market approval and our ability to achieve sufficient market acceptance and adequate market share for our products.

We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. The net losses we incur may fluctuate significantly from quarter to quarter. We anticipate that our expenses will increase substantially if and as we:

- continue our research and preclinical development of our product candidates, both independently and under our strategic alliance agreements;
- seek to identify additional targets and product candidates;
- acquire or in-license other products and technologies;
- advance product candidates into clinical trials;
- seek marketing approvals for our product candidates that successfully complete clinical trials;
- ultimately establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, regulatory, research, executive and administrative personnel;
- create additional infrastructure to support our operations and our product development and planned future commercialization efforts; and
- incur legal and other expenses in connection with legal proceedings.

We have never generated any revenue from product sales, have generated only limited revenue since inception, and may never be profitable.

Our ability to generate revenue and achieve profitability depends on our ability, alone or with strategic alliance partners, to successfully complete the development of, obtain the necessary regulatory approvals for and commercialize our product candidates. We do not anticipate generating revenues from sales of our products for the foreseeable future, if ever. Our ability to generate future revenues from product sales depends heavily on our success in:

- completing our research and preclinical development of product candidates;
- initiating and completing clinical trials for product candidates;
- seeking and obtaining marketing approvals for product candidates that successfully complete clinical trials;
- establishing and maintaining supply and manufacturing relationships with third parties;

- launching and commercializing product candidates for which we obtain marketing approval, with an alliance partner or, if launched independently, successfully establishing a sales force, marketing and distribution infrastructure;
- maintaining, protecting and expanding our intellectual property portfolio; and
- attracting, hiring and retaining qualified personnel.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to predict the timing or amount of increased expenses and when we will be able to achieve or maintain profitability, if ever. In addition, our expenses could increase beyond expectations if we are required by the United States Food and Drug Administration, or FDA, or other foreign regulatory agencies to perform studies and trials in addition to those that we currently anticipate.

Even if one or more of the product candidates that we independently develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product. Even if we are able to generate revenues from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations.

We may need to raise additional capital, which may not be available on acceptable terms, or at all.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is expensive. We expect our research and development expenses to substantially increase in connection with our ongoing activities, particularly as we advance our product candidates towards or through clinical trials. We may need to raise additional capital to support our operations and such funding may not be available to us on acceptable terms, or at all. As of December 31, 2018, we had unrestricted cash and cash equivalents of $36.7 million. We cannot provide assurances that our plans will not change or that changed circumstances will not result in the depletion of our capital resources more rapidly than we currently anticipate. For example, our preclinical trials may encounter technical or other difficulties. Additionally, our strategic alliance partners may not elect to pursue the development and commercialization of any of our product candidates that are subject to their respective strategic alliance agreements with us. Any of these events may increase our development costs more than we expect. In order to support our long-term plans, we may need to raise additional capital or otherwise obtain funding through additional strategic alliances if we choose to initiate preclinical or clinical trials for new product candidates other than programs currently partnered. In any event, we will require additional capital to obtain regulatory approval for, and to commercialize, future product candidates.

Any additional fundraising efforts may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize future product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- significantly delay, scale back or discontinue the development or commercialization of any future product candidates;
- seek strategic alliances for research and development programs at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available; or
- relinquish or license on unfavorable terms, our rights to technologies or any future product candidates that we otherwise would seek to develop or commercialize ourselves.

If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects.

We are exposed to interest rate risk, including under our existing loan agreements with our lender.

We are exposed to market risk from changes in interest rates. Exposure to interest rate risk results from our debt obligations, including the Loan Agreement entered into on October 12, 2018 by our wholly-owned subsidiary, Arcturus Therapeutics, Inc., with Western Alliance Bank (the "Western Loan Agreement"). The Western Loan Agreement bears a variable interest rate of 1.25% above the prime rate published by the Western Edition of the Wall Street Journal. As of December 31, 2018, we had $10.0 million outstanding under the Western Loan Agreement. If we were to experience a 10% adverse change in the prime rate referenced above, the annual effect such change would have on our statement of operations, based on the amount we had outstanding as of December 31, 2018, under the Western Loan Agreement, would be approximately $70,000.

Our indebtedness could materially and adversely affect our business, financial condition and results of operations.

Agreements with our lenders, including with Western Alliance Bank, create several limitations on us, including but not limited to:

- limiting our flexibility in planning for, or reacting to, changes in our business and our industry;
- placing us at a competitive disadvantage compared to our competitors who may have less debt or comparable debt at more favorable interest rates;
- limiting our ability to incur specified types of additional indebtedness which may be desired for working capital, capital expenditures, research and development efforts, acquisitions, debt service requirements, execution of our business strategy or other purposes; and
- resulting in an acceleration of our obligations upon the occurrence of an event of default.

Our ability to comply with these covenants in future periods will depend on our financial and operating performance, which in turn will be subject to economic conditions and to financial, market and competitive factors, many of which are beyond our control. Any of these factors or others described in the Western Loan Agreement could materially and adversely affect our business, financial condition and results of operations.

Our debt contains customary default clauses, a breach of which may result in acceleration of the repayment of some or all of this debt.

The Western Loan Agreement contains customary default clauses as well as covenants which include the Company's (1) nomination of a clinical candidate, which the Company was in compliance with, and (2) submission of a clinical candidate for Investigational New Drug application ("IND"), made to the U.S. Food and Drug Administration. In the event we were to default on our obligations under our debt and were unable to cure or obtain a waiver of such default, the repayment of our debt may be accelerated. If such acceleration were to occur, we would be required to secure alternative sources of equity or debt financing to be able to repay the debt. Alternative financing may not be available on terms satisfactory to us, or at all. New debt financing may require the cooperation and agreement of our existing lenders. If acceptable alternative financing were unavailable, we would have to consider alternatives to fund the repayment of the debt, which could materially and adversely affect our business, financial condition and results of operations.

RISKS RELATED TO THE DISCOVERY AND DEVELOPMENT OF PRODUCT CANDIDATES

Preclinical and clinical studies of our product candidates may not be successful. If we are unable to generate successful results from preclinical and clinical studies of our product candidates, or experience significant delays in doing so, our business may be materially harmed.

We have no products on the market and all of our product candidates are in preclinical development. In particular, none of our product candidates have ever been tested in a human subject. Our ability to achieve and

sustain profitability depends on obtaining regulatory approvals for and, if approved, successfully commercializing our product candidates, either alone or with third parties. Before obtaining regulatory approval for the commercial distribution of our product candidates, we or an existing or future collaborator must conduct extensive preclinical tests and clinical trials to demonstrate the safety, purity and potency of our product candidates.

The success of our product candidates will depend on several factors, including the following:

- successfully designing preclinical studies which may be predictive of clinical outcomes;
- successful results from preclinical and clinical studies;
- receipt of marketing approvals from applicable regulatory authorities;
- obtaining and maintaining patent and trade secret protection for future product candidates;
- establishing and maintaining manufacturing relationships with third parties or establishing our own manufacturing capability; and
- successfully commercializing our products, if and when approved, whether alone or in collaboration with others.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully complete the development or commercialization of our product candidates, which would materially harm our business.

The approach we are taking to discover and develop drugs is novel and may never lead to marketable products.

We have concentrated our therapeutic product research and development efforts on nucleic acid technology, and our future success depends on the successful development of this technology and products based on our nucleic acid product platform. Except for Onpattro (patisiran, which is marketed by Alnylam, Kynamro (mipomersen), which was marketed by Kastle Therapeutics, Vitravene (fomivirsen), which Novartis withdrew from the US market in 2006 and Spinraza (nusinersen), which is marketed by Biogen Inc., neither we, nor any other company, has to our knowledge received regulatory approval to market nucleic acid therapeutics. The scientific discoveries that form the basis for our efforts to discover and develop product candidates are relatively new. The scientific evidence to support the feasibility of developing product candidates based on these discoveries is both preliminary and limited. If we do not successfully develop and commercialize product candidates based upon our technological approach, we may not become profitable and the value of our Ordinary Shares may decline.

Further, our focus solely on nucleic acid technology for developing drugs as opposed to multiple, more proven technologies for drug development increases the risks associated with the ownership of our Ordinary Shares. If we are not successful in developing any product candidates using nucleic acid technology, we may be required to change the scope and direction of our product development activities. In that case, we may not be able to identify and implement successfully an alternative product development strategy.

We may not be successful in our efforts to identify or discover potential product candidates.

The success of our business depends primarily upon our ability to identify, develop and commercialize nucleic acid medicines. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for a number of reasons, including:

- our research methodology or that of our strategic alliance partners may be unsuccessful in identifying potential product candidates;
- potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval; or

- our strategic alliance partners may change their development profiles for potential product candidates or abandon a therapeutic area.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, which would have a material adverse effect on our business and could potentially cause us to cease operations. Research programs to identify new product candidates require substantial technical, financial and human resources. We may focus our efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful.

If future clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of product candidates, we or our strategic alliance partners must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Clinical trials are expensive, difficult to design and implement, can take many years to complete and are uncertain as to the outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for their products.

Events which may result in a delay or unsuccessful completion of clinical development include:

- delays in reaching an agreement with the FDA or other regulatory authorities on final trial design;
- imposition of a clinical hold of our clinical trial operations or trial sites by the FDA or other regulatory authorities;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites;
- our inability to adhere to clinical trial requirements directly or with third parties such as CROs;
- delays in obtaining required institutional review board approval at each clinical trial site;
- delays in recruiting suitable patients to participate in a trial;
- delays in the testing, validation, manufacturing and delivery of the product candidates to the clinical sites;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- delays caused by patients dropping out of a trial due to protocol procedures or requirements, product side effects or disease progression;
- clinical sites dropping out of a trial to the detriment of enrollment;
- time required to add new clinical sites; or
- delays by our contract manufacturers to produce and deliver sufficient supply of clinical trial materials.

If we or our strategic alliance partners are required to conduct additional clinical trials or other testing of any product candidates beyond those that are currently contemplated, are unable to successfully complete clinical

trials of any such product candidates or other testing, or if the results of these trials or tests are not positive, are only modestly positive or if there are safety concerns, we or our strategic alliance partners may:

- be delayed in obtaining marketing approval for our future product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as originally intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

Our product development costs will also increase if we experience delays in testing or marketing approvals. We do not know whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which would impair our ability to successfully commercialize our product candidates and may harm our business and results of operations. Any inability to successfully complete preclinical and clinical development, whether independently or with our strategic alliance partners, could result in additional costs to us or impair our ability to generate revenues from product sales, regulatory and commercialization milestones and royalties.

Any of our product candidates may cause undesirable side effects or have other properties impacting safety that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.

Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other regulatory authorities. While we have not yet initiated clinical trials for any of our product candidates, it is likely that there may be side effects associated with their use. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. Such side effects could also affect patient recruitment, the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may materially and adversely affect our business, financial condition, results of operations and prospects.

Further, clinical trials by their nature test product candidates in only samples of the potential patient populations. With a limited number of patients and limited duration of exposure in such trials, rare and severe side effects of our product candidates may not be uncovered until a significantly larger number of patients are exposed to the product candidate.

If any of our future products, if and when approved for commercial sale, cause serious or unexpected side effects, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy;
- regulatory authorities may require the addition of labeling statements, such as warnings or contraindications;
- we may be required to change the way the product is administered or conduct additional clinical trials;

- we could be sued and held liable for harm caused to patients; or
- our reputation may suffer.

Any of these events could prevent us or our partners from achieving or maintaining market acceptance of the affected product and could substantially increase the costs of commercializing our future products and impair our ability to generate revenues from the commercialization of these products either by us or by our strategic alliance partners.

Even if we complete the necessary preclinical studies and clinical trials, we cannot predict whether or when we will obtain regulatory approval to commercialize a product candidate and we cannot, therefore, predict the timing of any revenue from a future product.

Neither we nor our strategic alliance partners can commercialize a product until the appropriate regulatory authorities, such as the FDA, have reviewed and approved the product candidate. The regulatory agencies may not complete their review processes in a timely manner, or we may not be able to obtain regulatory approval. Additional delays may result if an FDA Advisory Committee recommends restrictions on approval or recommends non-approval. In addition, we or our strategic alliance partners may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory agency policy during the period of product development, clinical trials and the review process.

Even if we obtain regulatory approval for a product candidate, we will still face extensive regulatory requirements and our products may face future development and regulatory difficulties.

Even if we obtain regulatory approval in the United States, the FDA may still impose significant restrictions on the indicated uses or marketing of our product candidates, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. The holder of an approved new drug application (“NDA”) is obligated to monitor and report adverse events, or AEs, and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

In addition, drug product manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices, or cGMP, and adherence to commitments made in the NDA. If we or a regulatory agency discovers previously unknown problems with a product such as AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If we or our partners fail to comply with applicable regulatory requirements following approval of any of our product candidates, a regulatory agency may:

- issue a warning letter asserting that we are in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or supplements to an NDA submitted by us;
- seize product or require a product recall; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize our future products and generate revenues.

We may use our financial and human resources to pursue a particular research program or product candidate and fail to capitalize on programs or product candidates that may be more profitable or for which there is a greater likelihood of success.

As a result of our limited financial and human resources, we will have to make strategic decisions as to which targets and product candidates to pursue and may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through strategic alliance, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate, or we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials or other work-related injuries, this insurance may not provide adequate coverage against potential liabilities. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

RISKS RELATED TO OUR RELIANCE ON THIRD PARTIES

We depend upon our third-party alliances with partners and contract organizations for the development, manufacture and eventual commercialization of certain nucleic acid product candidates. If these third-party alliances are unsuccessful or are terminated, we may be unable to commercialize certain product candidates and we may be unable to generate revenues from our development programs.

We depend upon third party alliance partners for financial and scientific resources for the clinical development, manufacture and commercialization of certain of our nucleic acid product candidates. These alliances will likely provide us with limited control over the course of development of a nucleic acid product candidate, especially once a candidate has reached the stage of clinical development. For example, in our alliance with Ultragenyx, Ultragenyx has the option to obtain an exclusive worldwide license to develop, manufacture

and commercialize product candidates upon the achievement of relevant endpoints in preclinical studies and clinical trials. However, Ultragenyx is not under any obligation to exercise these options to progress any of our nucleic acid product candidates. While Ultragenyx has development obligations with respect to programs that it may elect to pursue under our agreement, our ability to ultimately recognize revenue from this and future relationships will depend upon the ability and willingness of our alliance partners to successfully meet their respective responsibilities under our agreements with them. Our ability to recognize revenues from successful strategic alliances may be impaired by several factors including:

- an alliance partner may shift its priorities and resources away from our programs due to a change in business strategies, or a merger, acquisition, sale or downsizing of its company or business unit;
- an alliance partner may cease development in therapeutic areas which are the subject of our strategic alliances;
- an alliance partner may change the success criteria for a particular program or potential product candidate thereby delaying or ceasing development of such program or candidate;
- a significant delay in initiation of certain development activities by an alliance partner will also delay payment of milestones tied to such activities, thereby impacting our ability to fund our own activities;
- an alliance partner could develop a product that competes, either directly or indirectly, with an alliance product;
- an alliance partner with commercialization obligations may not commit sufficient financial or human resources to the marketing, distribution or sale of a product;
- an alliance partner with manufacturing responsibilities may encounter regulatory, resource or quality issues and be unable to meet demand requirements;
- an alliance partner may exercise its rights under the agreement to terminate a strategic alliance;
- a dispute may arise between us and an alliance partner concerning the research, development or commercialization of a program or product candidate resulting in a delay in milestones, royalty payments or termination of a program and possibly resulting in costly litigation or arbitration which may divert management attention and resources; and
- an alliance partner may use our proprietary information or intellectual property in such a way as to invite litigation from a third party or fail to maintain or prosecute intellectual property rights such that our rights in such property are jeopardized.

If any of our alliance partners do not elect to pursue the development and commercialization of our nucleic acid development candidates or if they terminate the strategic alliance, then, depending on the event:

- product candidates subject to our alliances may be terminated or significantly delayed;
- our cash expenditures could increase significantly if it is necessary for us to hire additional employees and allocate scarce resources to the development and commercialization of product candidates that were previously funded, or expected to be funded, by our alliance partners;
- we would bear all of the risks and costs related to the further development and commercialization of product candidates that were previously the subject of our strategic alliance, including the reimbursement of third parties; and
- in order to fund further development and commercialization, we may need to seek out and establish alternative strategic alliances with third-party partners; this may not be possible, or we may not be able to do so on terms which are acceptable to us, in which case it may be necessary for us to limit the size or scope of one or more of our programs, increase our expenditures, or seek additional funding by other means.

Any of these events would have a material adverse effect on our results of operations and financial condition.

On February 11, 2019, the Company announced the termination of the obligations of CureVac AG ("CureVac") for the preclinical development of ARCT-810, effective 180 days from February 5, 2019 and the re-assumption by the Company of the worldwide rights thereto. Arcturus will reassume 100% global rights for its flagship asset, clinical development candidate ARCT-810, a messenger RNA (mRNA) drug to treat ornithine transcarbamylase (OTC) deficiency. ARCT-810 was previously subject to a 50/50 collaboration between Arcturus and CureVac AG. CureVac elected not to continue its obligations for the preclinical development of ARCT-810 under and pursuant to the terms of the collaboration.

The preclinical development program for ARCT-810, including Investigational New Drug Application (IND) enabling studies, remains on track. Arcturus is planning to file an IND for ARCT-810 with the U.S. Food and Drug Administration (FDA) in the fourth quarter of 2019.

Pursuant to the terms of the Co-Development Agreement, CureVac is obligated to continue to fund its share of the preclinical expenses for the OTC program until August of 2019. We expect that Curevac's share of these preclinical expenses for 2019 will be between $6 and $7.5 million. However, CureVac's decision to terminate its participation in our OTC deficiency program will require that we finance additional preclinical and clinical activities to develop and commercialize OTC products. We will be materially harmed if we are unable to obtain such additional funds.

Certain agreements with our alliance partners may impair or prevent entirely our ability to generate revenues from the development, manufacture and commercialization of certain product candidates.

Under the Development and Option Agreement with CureVac, as amended (the "CureVac Agreement"), CureVac may be entitled to trigger an option to license certain of our product candidates. CureVac may identify certain of our development candidates as targets under the CureVac Agreement and exercise an option to enter into an exclusive or non-exclusive license agreement with us with respect to these identified targets, subject to the limitations given in the CureVac Agreement. The exercise of this option by CureVac may impair or prevent entirely our ability to generate revenues from the commercialization of these development candidates, as the licensing agreement may give CureVac the right to receive some or all of the revenues from the development, manufacture and/or commercialization of these development candidates. Our inability to realize the benefits from developing, manufacturing or marketing our development candidates with our alliance partners, including with CureVac, may have a material adverse impact on our business, financial condition and prospects.

We rely on third parties to conduct some aspects of our compound formulation, research and preclinical studies, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such formulation, research or testing.

We do not expect to independently conduct all aspects of our drug discovery activities, compound formulation research or preclinical studies of product candidates. We currently rely and expect to continue to rely on third parties to conduct some aspects of our preclinical studies and formulation development.

Any of these third parties may terminate their engagements with us at any time. If we need to enter into alternative arrangements, it would delay our product development activities. Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, for product candidates that we develop and commercialize on our own, we will remain responsible for ensuring that each of our IND-enabling studies and clinical trials are conducted in accordance with the study plan and protocols for the trial.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our studies in accordance with regulatory requirements or our stated study plans and protocols, we will

not be able to complete, or may be delayed in completing, the necessary preclinical studies to enable us or our strategic alliance partners to select viable product candidates for IND submissions and will not be able to, or may be delayed in our efforts to, successfully develop and commercialize such product candidates.

We rely on third-party manufacturers to produce the supply of our preclinical product candidates, and we intend to rely on third parties to produce future clinical supplies of product candidates that we advance into clinical trials and commercial supplies of any approved product candidates.

Reliance on third-party manufacturers entails risks, including risks that we would not be subject to if we manufactured the product candidates ourselves, including:

- the inability to meet any product specifications and quality requirements consistently;
- a delay or inability to procure or expand sufficient manufacturing capacity;
- manufacturing and product quality issues related to scale-up of manufacturing;
- costs and validation of new equipment and facilities required for scale-up;
- a failure to comply with cGMP and similar foreign standards;
- the inability to negotiate manufacturing or supply agreements with third parties under commercially reasonable terms;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to us;
- the reliance on a limited number of sources, and in some cases, single sources for raw materials, such that if we are unable to secure a sufficient supply of these product components, we will be unable to manufacture and sell future product candidates in a timely fashion, in sufficient quantities or under acceptable terms;
- the lack of qualified backup suppliers for any raw materials that are currently purchased from a single source supplier;
- operations of our third-party manufacturers or suppliers could be disrupted by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier;
- carrier disruptions or increased costs that are beyond our control; and
- the failure to deliver products under specified storage conditions and in a timely manner.

Any of these events could lead to clinical study delays or failure to obtain regulatory approval, or impact our ability to successfully commercialize future products. Some of these events could be the basis for FDA action, including injunction, recall, seizure or total or partial suspension of production.

We rely on limited sources of supply for the drug substance of product candidates and any disruption in the chain of supply may cause a delay in developing and commercializing these product candidates.

We have established manufacturing relationships with a limited number of suppliers to manufacture raw materials and the drug substance used to create our product candidates. The availability of such suppliers to manufacture raw materials for our product candidates may be limited. Further, each supplier may require licenses to manufacture such components if such processes are not owned by the supplier or in the public domain. As part of any marketing approval, a manufacturer and its processes are required to be qualified by the FDA prior to commercialization. If supply from the approved vendor is interrupted, there could be a significant disruption in commercial supply. An alternative vendor would need to be qualified through an NDA supplement which could result in further delay. The FDA or other regulatory agencies outside of the United States may also require additional studies if a new supplier is relied upon for commercial production. Switching vendors may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

In addition, if our alliance partners elect to pursue the development and commercialization of certain programs, we will lose control over the manufacturing of the product candidate subject to the agreement. Also, we will not be able to ensure that the product candidates will be manufactured under the correct conditions to permit the product candidates to be used in such clinical trials.

These factors could cause the delay of clinical trials, regulatory submissions, required approvals or commercialization of our product candidates, cause us to incur higher costs and prevent us from commercializing our products successfully. Furthermore, if our suppliers fail to deliver the required commercial quantities of active pharmaceutical ingredients on a timely basis and at commercially reasonable prices, and we are unable to secure one or more replacement suppliers capable of production in a timely manner at a substantially equivalent cost, our clinical trials may be delayed or we could lose potential revenue.

Manufacturing issues may arise that could increase product and regulatory approval costs or delay commercialization.

As we scale-up manufacturing of product candidates and conduct required stability testing, product, packaging, equipment and process-related issues may require refinement or resolution in order to proceed with any clinical trials and obtain regulatory approval for commercial marketing. We may identify significant impurities, which could result in increased scrutiny by the regulatory agencies, delays in clinical programs and regulatory approval, increases in our operating expenses, or failure to obtain or maintain approval for product candidates or any approved products.

We intend to rely on third parties to conduct, supervise and monitor our clinical trials, and if those third parties perform in an unsatisfactory manner, it may harm our business.

We or our strategic alliance partners intend to rely on contract research organizations (“CROs”) and clinical trial sites to ensure the proper and timely conduct of our clinical trials. While we will have agreements governing their activities, we and our strategic alliance partners have limited influence over their actual performance. We will control only certain aspects of our CROs’ activities. Nevertheless, we or our strategic alliance partners will be responsible for ensuring that each of our clinical trials are conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs will not relieve us of our regulatory responsibilities.

We, our alliance partners and our CROs will be required to comply with the FDA’s or other regulatory agency’s good clinical practices, or GCPs, for conducting, recording and reporting the results of IND-enabling studies and clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of future clinical trial participants are protected. The FDA and non-U.S. regulatory agencies enforce these GCPs through periodic inspections of trial sponsors, principal investigators and clinical trial sites. If we or our future CROs fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or applicable non-U.S. regulatory agency may require us to perform additional clinical trials before approving any marketing applications for the relevant jurisdiction. Upon inspection, the FDA or applicable non-U.S. regulatory agency may determine that our future clinical trials did not comply with GCPs. In addition, our future clinical trials will require a sufficiently large number of test subjects to evaluate the safety and effectiveness of a potential drug product. Accordingly, if our future CROs fail to comply with these regulations or fail to recruit a sufficient number of patients, we may be required to repeat such clinical trials, which would delay the regulatory approval process.

Our future CROs will not be our employees, and we will not be able to control whether or not they devote sufficient time and resources to our future clinical and nonclinical programs. These CROs may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials, or other drug development activities which could harm our competitive position. If our future CROs do not successfully carry out their contractual duties or obligations, fail to meet expected deadlines, or if

the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements, or for any other reasons, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for such products and any product candidates that we develop would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

We intend to rely on other third parties to store and distribute drug products for any clinical trials that we may conduct. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, if approved, producing additional losses and depriving us of potential product revenue.

RISKS RELATED TO OUR INTELLECTUAL PROPERTY

If we are unable to obtain or protect intellectual property rights related to our future products and product candidates, we may not be able to compete effectively in our markets.

Our success depends in part on our ability to obtain and maintain patents and other forms of intellectual property rights, including in-licenses of intellectual property rights of others, for our product candidates, methods used to develop and manufacture our product candidates and methods for treating patients using our product candidates, as well as our ability to preserve our trade secrets, to prevent third parties from infringing upon our proprietary rights and to operate without infringing upon the proprietary rights of others. As of March 1, 2019, we are the sole owner of 152 patents and pending patent applications including 18 U.S. patents, 24 pending U.S. patent applications, 7 pending international under the Patent Cooperation Treaty (“PCT”), 44 foreign patents and 59 pending foreign patent applications. The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in patents with claims that cover the products in the United States or in other countries. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found; such prior art can invalidate a patent or prevent a patent from issuing based on a pending patent application. Even if patents do successfully issue, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed or invalidated. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims.

If the patent applications we hold or have in-licensed with respect to our programs or product candidates fail to issue or if their breadth or strength of protection is threatened, it could dissuade companies from collaborating with us to develop product candidates, and threaten our ability to commercialize, future products. We cannot offer any assurances about which, if any, patents will issue or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. A patent may be challenged through one or more of several administrative proceedings including post-grant challenges, re-examination or opposition before the U.S. PTO or foreign patent offices. For example, re-examination of, or oppositions to, patents owned by or licensed to us have previously been initiated, and while we believe these concluded proceedings did not result in a commercially relevant impact on the individual patents, any successful challenge of patents or any other patents owned by or licensed to us could deprive us of rights necessary for the successful commercialization of any product candidates that we or our strategic alliance partners may develop.

Since patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we were the first to file any patent application related to a product candidate. Furthermore, in certain situations, if we and one or more third parties have filed patent applications in the United States and claiming the same subject matter, an administrative proceeding, known as an interference, can be initiated to determine which applicant is entitled to the patent on

that subject matter. Such an interference proceeding provoked by third parties or brought by us may be necessary to determine the priority of inventions with respect to our patents or patent applications, or those of our alliance partners or licensors. An unfavorable outcome could require us to cease using the related technology or to require us to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license at all, or on commercially reasonable terms. Our defense of a patent or patent application in such a proceeding may not be successful and, even if successful, may result in substantial costs and distract our management and other employees.

In addition, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available however the life of a patent, and the protection it affords is limited. Once the patent life has expired for a product, we may be open to competition from generic medications. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate under patent protection could be reduced.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, including processes for which patents are difficult to enforce and any other elements of our drug discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Although each of our employees agrees to assign their inventions to us through an employee inventions agreement, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology are required to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed, that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. In addition, others may independently discover our trade secrets and proprietary information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that we may consider to be trade secrets or other proprietary information, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all.

Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the non-patented intellectual property related to our technologies to third parties, and there is no guarantee that we will have any such enforceable trade secret protection, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our strategic alliance partners are pursuing development candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications

can take many years to issue, there may be currently pending patent applications which may later result in patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire. Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

If we fail to obtain licenses or comply with our obligations in these agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.

We are a party to intellectual property license agreements that are important to our business and expect to enter into additional license agreements in the future. Our existing license agreements impose, and we expect that future license agreements will impose, various obligations on us, as described in "Other Material Agreements" and "Collaboration Agreements" under Part I, Item 1 and elsewhere in this annual report.

We may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates, and we have done so from time to time. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our future products, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensees, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensees. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or of our licensees is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Our defense in a lawsuit may fail and, even if successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensees, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our Ordinary Shares.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. We may also be subject to claims that former employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees.

RISKS RELATED TO COMMERCIALIZATION OF PRODUCT CANDIDATES

The commercial success of our programs that are part of our strategic alliance agreements will depend in large part on the development and marketing efforts of our alliance partners. If our alliance partners are unable or unwilling to perform in accordance with the terms of our agreements, our potential to generate future revenue from these programs would be significantly reduced and our business would be materially and adversely harmed.

If or when our strategic alliance partners elect to further pursue the development and commercialization of any of the product candidates that are subject to its strategic alliance agreement with us, we will have limited influence and/or control over their approaches to development and commercialization. If strategic alliance partners do not perform in the manner that we expect or fail to fulfill their responsibilities in a timely manner, or at all, the clinical development, regulatory approval and commercialization efforts related to product candidates we have licensed to such strategic alliance partners could be delayed or terminated. If we terminate any of our strategic alliances or any program thereunder, we may have the right to assume the responsibility at our own expense for the development of the applicable product candidates. Assuming sole responsibility for further development will increase our expenditures, and may mean we will need to limit the size and scope of one or more of our programs, seek additional funding and/or choose to stop work altogether on one or more of the affected product candidates. This could result in a limited potential to generate future revenue from such product candidates and our business could be materially and adversely affected.

We face significant competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively.

The biotechnology and pharmaceutical industries are intensely competitive. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, biotechnology companies and universities and other research institutions. Our competitors may have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations. Additional mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis, drug products that are more effective or less costly than any product candidate that we may develop.

All of our programs are preclinical and targeted toward indications for which there are product candidates in clinical development. We will face competition from other drugs currently approved or that may be approved in the future for the same therapeutic indications. For example, both Synlogic and Ultragenyx are currently conducting clinical trials with therapies to treat ornithine transcarbamylase, or OTC, deficiency. Currently approved therapies for these patients include the small molecule nitrogen scavengers sodium benzoate, sodium phenylacetate, and sodium phenylbutyrate, and glycerol phenylbutyrate (brand name Ravicti®). Our ability to compete successfully will depend largely on our ability to leverage our experience in drug discovery and development to:

- discover and develop therapeutics that are superior to other products in the market;
- attract qualified scientific, product development and commercial personnel;
- obtain patent and/or other proprietary protection for our nucleic acid product platform and future product candidates;
- obtain required regulatory approvals; and
- successfully collaborate with pharmaceutical companies in the discovery, development and commercialization of new therapeutics.

The availability of our competitors' products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize. We will not achieve our business plan if the acceptance of any of these products is inhibited by price competition or the reluctance of physicians to switch from existing drug products to our products, or if physicians switch to other new drug products or choose to reserve our future products for use in limited circumstances. The inability to compete with existing or subsequently introduced drug products would have a material adverse impact on our business, financial condition and prospects.

Established pharmaceutical companies may invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make our product candidates less competitive. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or discovering, developing and commercializing product candidates before we do, which would have a material adverse impact on our business.

The commercial success of our product candidates will depend upon the acceptance of these product candidates by the medical community, including physicians, patients and healthcare payors.

The degree of market acceptance of any product candidates will depend on a number of factors, including:

- demonstration of clinical safety and efficacy compared to other products;
- the relative convenience, ease of administration and acceptance by physicians, patients and healthcare payors;
- the prevalence and severity of any AEs;
- limitations or warnings contained in the FDA-approved label for such products;
- availability of alternative treatments;
- pricing and cost-effectiveness;
- the effectiveness of our, or any of our collaborators', sales and marketing strategies;
- our ability to obtain hospital formulary approval;

- our ability to obtain and maintain sufficient third-party coverage and adequate reimbursement; and
- the willingness of patients to pay out-of-pocket in the absence of third-party coverage.

Unless other formulations are developed in the future, we expect our compounds to be formulated in an injectable form. Injectable medications may be disfavored by patients or their physicians in the event drugs which are easy to administer, such as oral medications, are available. If a product is approved, but does not achieve an adequate level of acceptance by physicians, patients and healthcare payors, we may not generate sufficient revenues from such product and we may not become or remain profitable. Such increased competition may decrease any future potential revenue for future product candidates due to increasing pressure for lower pricing and higher discounts in the commercialization of our product.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate any revenues.

We currently do not have an organization for the sales, marketing and distribution of pharmaceutical products and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products that may be approved, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. With respect to certain of our current programs as well as future programs, we may rely completely on an alliance partner for sales and marketing. In addition, we intend to enter into strategic alliances with third parties to commercialize other product candidates, including in markets outside of the United States or for other large markets that are beyond our resources. Although we intend to establish a sales organization if we are able to obtain approval to market any product candidates for niche markets in the United States, we will also consider the option to enter into strategic alliances for future product candidates in the United States if commercialization requirements exceed our available resources. This will reduce the revenue generated from the sales of these products.

Our current and any future strategic alliance partners may not dedicate sufficient resources to the commercialization of our product candidates or may otherwise fail in their commercialization due to factors beyond our control. If we are unable to establish effective alliances to enable the sale of our product candidates to healthcare professionals and in geographical regions, including the United States, that will not be covered by our own marketing and sales force, or if our potential future strategic alliance partners do not successfully commercialize the product candidates, our ability to generate revenues from product sales will be adversely affected.

If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate sufficient product revenue and may not become profitable. We will be competing with many companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

If we obtain approval to commercialize any approved products outside of the United States, a variety of risks associated with international operations could materially adversely affect our business.

If we obtain approval to commercialize any approved products outside of the United States, we expect that we will be subject to additional risks related to entering into international business relationships, including:

- different regulatory requirements for drug approvals in foreign countries;
- differing payor reimbursement regimes, governmental payors or patient self-pay systems and price controls;
- reduced protection for intellectual property rights;

- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

Coverage and adequate reimbursement may not be available for our product candidates, which could make it difficult for us to sell products profitably.

Market acceptance and sales of any product candidates that we develop will depend on coverage and reimbursement policies and may be affected by future healthcare reform measures. Government authorities and third-party payors, such as private health insurers, government payors and health maintenance organizations, decide which drugs they will pay for and establish reimbursement levels. We cannot be sure that coverage and adequate reimbursement will be available for any future product candidates. Also, inadequate reimbursement amounts may reduce the demand for, or the price of, our future products. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. If reimbursement is not available, or is available only at limited levels, we may not be able to successfully commercialize product candidates that we develop.

In addition, we cannot be certain if and when we will obtain formulary approval to allow us to sell any products that we may develop and commercialize into our target markets. Obtaining formulary approval from hospitals and from payors can be an expensive and time-consuming process. Failure to obtain timely formulary approval will limit our commercial success.

There have been a number of legislative and regulatory proposals to change the healthcare system in the United States and in some foreign jurisdictions that could affect our ability to sell products profitably. These legislative and/or regulatory changes may negatively impact the reimbursement for drug products, following approval. The availability of numerous generic treatments may also substantially reduce the likelihood of reimbursement for our future products. The potential application of user fees to generic drug products may expedite the approval of additional generic drug treatments. We expect to experience pricing pressures in connection with the sale of any products that we develop, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. If we fail to successfully secure and maintain reimbursement coverage for our future products or are significantly delayed in doing so, we will have difficulty achieving market acceptance of our future products and our business will be harmed.

In addition, in some non-U.S. jurisdictions, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the EU provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for

human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the EU do not follow price structures of the U.S. and generally tend to be priced significantly lower.

RISKS RELATED TO OUR BUSINESS OPERATIONS AND INDUSTRY

Our future success depends on our ability to attract and retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on principal members of our executive team, and any reduction or loss of their services may adversely impact the achievement of our objectives. While we have entered into employment agreements with each of our executive officers, any of them could leave our employment at any time, as all of our employees are "at will" employees. Recruiting and retaining other qualified employees for our business, including scientific and technical personnel, will also be critical to our success. There is currently a shortage of skilled executives in our industry, which is likely to continue. As a result, competition for skilled personnel is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical companies for individuals with similar skill sets. In addition, failure to succeed in preclinical studies and clinical trials may make it more challenging to recruit and retain qualified personnel. The inability to recruit any executive or key employee or the loss of the services of any executive or key employee might impede the progress of our research, development and commercialization objectives.

We may need to expand our organization and may experience difficulties in managing this growth, which could disrupt our operations.

As of December 31, 2018, we had 72 employees. In the future we may expand our employee base to increase our managerial, scientific, operational, commercial, financial and other resources and we may hire more consultants and contractors. Future growth would impose significant additional responsibilities on our management, including the need to identify, recruit, maintain, motivate and integrate additional employees, consultants and contractors. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure or give rise to operational mistakes, loss of business opportunities, loss of employees or reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. Moreover, if our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional or nonintentional failures to comply with the regulations of the FDA and non-U.S. regulators, to provide accurate information to the FDA and non-U.S. regulators, to comply with healthcare fraud and abuse laws and regulations in the United States and abroad, to report financial information or data accurately or to

disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We have adopted a code of conduct, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, fines, possible exclusion from Medicare, Medicaid and other government healthcare programs, additional reporting requirements and/or oversight, particularly if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance, disgorgement, imprisonment, and contractual damages.

We intend to redomicile to the U.S. and such redomiciliation may result in disruptions to our business or otherwise materially harm our results of operations or financial condition.

We are incorporated in Israel, while all of our offices, assets, management, board members and most of our business partners are located in the United States. We have begun proceedings in Israel to reincorporate in the State of Delaware, in the United States, while maintaining our Nasdaq listing. Such reincorporation may require a significant amount of time, cost and focus from management and other employees, which may divert attention from our research and commercial activities. If any reincorporation activities we undertake in the future fail to achieve some or all of the expected benefits therefrom, our business, results of operations and financial condition could be materially and adversely affected.

In addition, a redomiciliation of the company will be subject to all corporate approvals, which will include an approval of our shareholders, and such redomiciliation may result in certain shareholders recognizing taxable income in the jurisdiction in which such shareholders are tax residents or in, in certain cases, in which their members or partners are resident. Shareholders may be subject to withholding taxes or other taxes with respect to their ownership of the company after the reincorporation. If a plan to redomicile the company is adopted and executed, we do not intend to make any cash distributions to shareholders to pay such taxes.

Certain current and future relationships with customers and third-party payors as well as certain of our business operations may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws and health information privacy and security laws. If we are unable to comply, or have not fully complied, with such laws, we could face criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

If we obtain FDA approval for any of our product candidates and begin commercializing those products in the United States, our operations may be directly, or indirectly through our customers, further subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by the federal government and by the U.S. states and foreign jurisdictions in which we conduct our business. The healthcare laws and regulations that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, either the referral of an individual, or the purchase or recommendation of an item or service for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs;

- federal civil and criminal false claims laws and civil monetary penalty laws, including the federal False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment to the federal government, including Medicare or Medicaid, that are false or fraudulent;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit, among other things, executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their implementing regulations, which imposes certain requirements on certain types of individuals and entities, such as healthcare providers, health plans and healthcare clearing houses, known as "covered entities," as well as their "business associates", independent contractors or agents of covered entities that receive or obtain individually identifiable health information in connection with providing a service on behalf of a covered entity, relating to the privacy, security and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments or other transfers of value made to physicians, and further requires applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians and their immediate family members; and
- state and foreign law equivalents of each of the above federal laws, such as: anti-kickback and false claims laws which may apply to items or services reimbursed by any third party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; state and local laws that require the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

In addition, the European Union, or EU, has established its own data security and privacy legal framework, including but not limited to Directive 95/46/EC, or the Data Protection Directive. The European General Data Protection Regulation, or GDPR, took effect on May 25, 2018, which contains new provisions specifically directed at the processing of health information, higher sanctions and extra-territoriality measures intended to bring non-EU companies under the regulation. We anticipate that over time we may expand our business operations to include additional operations in the EU, including potentially conducting preclinical and clinical trials. With such expansion, we would be subject to increased governmental regulation in the EU countries in which we might operate, including regulation due to the GDPR.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, civil, criminal and administrative penalties, damages, fines, possible exclusion from Medicare, Medicaid and other government healthcare programs, additional reporting requirements and/or oversight, particularly if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance, disgorgement, imprisonment, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Recent and future healthcare legislation may further impact our business operations.

The United States and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, was enacted, which made a number of substantial changes in the way healthcare is financed by both governmental and private insurers. Since its passage, there have been judicial and Congressional challenges to certain aspects of the ACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. On December 22, 2017, President Trump signed into law H.R. 1, "An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018," informally titled the Tax Cuts and Jobs Act, which significantly revises the U.S. Internal Revenue Code of 1986, as amended (the Code). The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the ACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." As a result, there is significant uncertainty regarding future healthcare reform and its impact on our operations.

Further, there has been heightened governmental scrutiny in the United States of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. Such scrutiny has resulted in several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. While any proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, to encourage importation from other countries and bulk purchasing.

We expect that healthcare reform measures that may be adopted in the future may result in more rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for

any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors.

We cannot predict what healthcare reform initiatives may be adopted in the future. Further federal, state and foreign legislative and regulatory developments are likely, and we expect ongoing initiatives to increase pressure on drug pricing. Such reforms could have an adverse effect on anticipated revenues from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability and costs.

The use of our product candidates in future clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. For example, unanticipated adverse effects could result from the use of our future products or product candidates which may result in a potential product liability claim. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs due to related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize our product candidates; and
- decreased demand for our product candidates, if approved for commercial sale.

We plan to obtain product liability insurance relating to the use of our therapeutics in future clinical trials. However, such insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to obtain or maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our share price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

Cyber security risks and the failure to maintain the confidentiality, integrity, and availability of our computer hardware, software, and Internet applications and related tools and functions could result in damage to our reputation and/or subject us to costs, fines or lawsuits.

Our business requires manipulating, analyzing and storing large amounts of data. In addition, we rely on a global enterprise software system to operate and manage our business. We also maintain personally identifiable information about our employees. Our business therefore depends on the continuous, effective, reliable, and secure operation of our computer hardware, software, networks, Internet servers, and related infrastructure. To the extent that our hardware or software malfunctions or access to our data by internal research personnel is interrupted, our business could suffer. The integrity and protection of our employee and company data is critical

to our business and employees have a high expectation that we will adequately protect their personal information. The regulatory environment governing information, security and privacy laws is increasingly demanding and continues to evolve. Maintaining compliance with applicable security and privacy regulations may increase our operating costs. Although our computer and communications hardware is protected through physical and software safeguards, it is still vulnerable to fire, storm, flood, power loss, earthquakes, telecommunications failures, physical or software break-ins, software viruses, and similar events. These events could lead to the unauthorized access, disclosure and use of non-public information. The techniques used by criminal elements to attack computer systems are sophisticated, change frequently and may originate from less regulated and remote areas of the world. As a result, we may not be able to address these techniques proactively or implement adequate preventative measures. If our computer systems are compromised, we could be subject to fines, damages, litigation and enforcement actions, and we could lose trade secrets, the occurrence of which could harm our business. In addition, any sustained disruption in internet access provided by other companies could harm our business.

Business interruptions could delay us in the process of developing our future products.

Our headquarters are located in San Diego, California. We are vulnerable to natural disasters such as earthquakes and wild fires, as well as other events that could disrupt our operations. We do not carry insurance for earthquakes or other natural disasters and we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our business operations.

RISKS RELATED TO OUR ORDINARY SHARES

The market price of our Ordinary Shares may be highly volatile and investors may not be able to resell shares at or above the price at which they purchase the shares.

Since our merger on November 15, 2017 through March 1, 2019, our closing share price as reported on The Nasdaq Global Market (“Nasdaq”), has ranged from $4.11 to $10.22. The trading price of our Ordinary Shares is likely to continue to be volatile.

Our share price could be subject to wide fluctuations in response to a variety of factors, including but not limited to the following factors:

- adverse results or delays in preclinical studies or clinical trials;
- inability to obtain additional funding;
- any delay in filing an IND or BLA for any of our product candidates and any adverse development or perceived adverse development with respect to the FDA’s review of that IND or BLA;
- failure to maintain our existing strategic alliances or enter into new alliances;
- failure of our strategic alliance partners to elect to develop and commercialize product candidates under our alliance agreements or the termination of any programs under our alliance agreements;
- failure by us or our licensors and strategic alliance partners to prosecute, maintain or enforce our intellectual property rights;
- failure to successfully develop and commercialize our product candidates;
- changes in laws or regulations applicable to our preclinical and clinical development activities, product candidates or future products;
- inability to obtain adequate product supply for our product candidates or the inability to do so at acceptable prices;

- adverse regulatory decisions;
- introduction of new products, services or technologies by our competitors;
- failure to meet or exceed financial projections we may provide to the public;
- failure to meet or exceed the estimates and projections of the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us, our strategic alliance partners or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of key scientific or management personnel;
- significant lawsuits, including patent or licensing matters;
- changes in the market valuations of similar companies;
- sales of our Ordinary Shares by us or our shareholders in the future; and
- trading volume of our Ordinary Shares.

In addition, companies trading in the stock market in general, and Nasdaq in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our Ordinary Shares, regardless of our actual operating performance.

The requirements of being a publicly traded company may strain our resources and divert management's attention.

As a publicly traded company, we have incurred, and will continue to incur, significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and Nasdaq have imposed various requirements on public companies. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Shareholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain our current levels of such coverage. In addition, most of our personnel consists of the Arcturus Therapeutics, Inc. employees prior to the merger, some of whom may not have previously managed and operated a public company. These employees will need to devote substantial time to gaining expertise regarding operations as a public company and compliance with applicable laws and regulations including the costs associated with the filing requirements under Section 16 of the Exchange Act.

We are no longer an "emerging growth company" and are therefore subject to the auditor attestation requirement in the assessment of our internal controls over financial reporting and certain other increased disclosure and governance requirements.

At the end of fiscal year 2018, we lost our status as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). As a result, we are no longer able to take advantage of certain exemptions from various reporting requirements. Therefore, we are now subject to certain requirements that apply to other public companies that did not previously apply to us, due to our previous status as an emerging growth company. These requirements include:

- compliance with the auditor attestation requirement in the assessment of our internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act;
- compliance with any new rules that may be adopted by the Public Company Accounting Oversight Board;
- compliance with any new or revised financial accounting standards applicable to public companies without an extended transition period;
- full disclosure regarding executive compensation required of larger public companies; and
- compliance with the requirement of holding a nonbinding advisory vote on executive compensation and obtaining shareholder approval of any golden parachute payments not previously approved.

Failure to comply with these requirements could subject us to enforcement actions by the SEC, divert management's attention, damage our reputation, and adversely affect our business, results of operations, or financial condition. In particular, if our independent registered public accounting firm is not able to render the required attestation, it could result in a loss of investor confidence in the accuracy, reliability, and completeness of our financial reports. We expect that the loss of "emerging growth company" status and compliance with these additional requirements will require management to expend additional time while also condensing the time frame available to comply with certain requirements, which may further increase our legal and financial compliance costs.

We may be at risk of securities class action litigation.

We may be at risk of securities class action litigation. This risk is especially relevant for us due to our dependence on positive clinical trial outcomes and regulatory approvals of each of our product candidates. In the past, medicines, biotechnology and pharmaceutical companies have experienced significant stock price volatility, particularly when associated with binary events such as clinical trials and product approvals. If we face such litigation, it could result in substantial costs, divert management's attention and resources, or have a material adverse effect on our business, operating results and prospects.

Sales of a substantial number of our Ordinary Shares in the public market by our existing shareholders could cause our share price to fall.

If our existing shareholders sell, or indicate an intention to sell, substantial amounts of those Ordinary Shares in the public market, the trading price of our Ordinary Shares could decline. In particular, the former shareholders, warrant holders and noteholders of Arcturus Therapeutics, Inc. received an aggregate of 6,631,712 of our Ordinary Shares pursuant to the merger in an unregistered transaction, which shares may be sold pursuant to Rule 144 under the Securities Act. Those shareholders are eligible to sell those shares in the public market without restriction, except for shareholders who are deemed "affiliates" of the Company under Rule 144 under the Securities Act. In addition, Ordinary Shares that are either subject to outstanding options or reserved for future issuance under our employee benefit plans are or may become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules and Rule 144 under the Securities Act. If these Ordinary Shares are sold, or if it is perceived that they will be sold, in the public market, that could create downward pressure on the trading price of our Ordinary Shares and cause the trading price to decline.

Future sales and issuances of our Ordinary Shares or rights to purchase Ordinary Shares, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our shareholders and could cause our share price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our shareholders may experience substantial dilution. Pursuant to our 2018 Omnibus Equity Incentive Plan, or the 2018 Plan, our management is authorized to grant options and other equity-based awards to our employees, directors and consultants. We may sell Ordinary Shares, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time, any of which may result in material dilution to investors and/or our existing shareholders. New investors could also be issued securities with rights superior to those of our existing shareholders.

We may be unable to comply with the applicable continued listing requirements of Nasdaq.

Our Ordinary Shares are currently listed on Nasdaq. In order to maintain this listing, we must satisfy minimum financial and other continued listing requirements and standards, including a minimum closing bid price requirement for our Ordinary Shares of $1.00 per share. There can be no assurance that we will be able to comply with the applicable listing standards. For example, if we were to fail to meet the minimum bid price requirement for 30 consecutive business days, we could become subject to delisting. Although Nasdaq may provide us with a compliance period in which to regain compliance with the minimum bid price requirement, we cannot assure you that we would be able to regain compliance within the period provided by Nasdaq. In order to regain compliance with such requirement, the closing bid price of our Ordinary Shares would need to meet or exceed $1.00 per share for at least 10 consecutive business days during the compliance period. If we were not able to regain compliance within the allotted compliance period for this requirement or any other applicable listing standard, including any extensions that may be granted by Nasdaq, our Ordinary Shares would be subject to delisting. In the event that our Ordinary Shares are delisted from Nasdaq and are not eligible for quotation or listing on another market or exchange, trading of our Ordinary Shares could be conducted only in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for our Ordinary Shares and there would likely also be a reduction in our coverage by securities analysts and the news media, which could cause the price of our Ordinary Shares to decline further.

We are treated as a U.S. corporation for U.S. federal tax purposes.

Pursuant to Section 7874 of the Code, we are treated as a U.S. corporation for U.S. federal income tax purposes. As a result, we are subject to U.S. federal corporate income tax as if we were incorporated in the United States. Shareholders should consult their tax advisers regarding the tax consequences of holding our Ordinary Shares based on their particular circumstances.

The recently enacted U.S. federal income tax reform bill could adversely affect our business and financial condition.

As noted above, on December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act, which significantly revises the Code. The Tax Cuts and Jobs Act, among other things, contains significant changes to U.S. federal corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, elimination of U.S. tax on foreign earnings (subject to certain important exceptions), immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits. Notwithstanding the

reduction in the corporate income tax rate, the overall impact of the Tax Cuts and Jobs Act is uncertain and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law. The impact of the Tax Cuts and Jobs Act on holders of our Ordinary Shares is also uncertain and could be adverse. We urge our shareholders to consult with their legal and tax advisors with respect to this legislation and the potential tax consequences of investing in or holding our Ordinary Shares.

Unlike in prior years, as of January 1, 2019, we are required to comply with the domestic reporting regime under the Exchange Act and will incur significant legal, accounting and other expenses, and our management will be required to devote substantial additional time to new compliance initiatives and corporate governance matters.

We determined that, effective as of January 1, 2019, we no longer qualified as a "foreign private issuer" under the rules and regulations of the SEC. While we were a foreign private issuer, we were exempt from compliance with certain laws and regulations of the SEC, including the proxy rules, the short-swing profits recapture rules and certain governance requirements, such as independent director oversight of the nomination of directors and executive compensation. In addition, we were not required to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. companies registered under the Exchange Act. As a result of this determination, beginning on January 1, 2019, we were no longer entitled to "foreign private issuer" exemptions and we plan to report as a domestic U.S. filer, including filing quarterly reports on Form 10-Q, current reports on Form 8-K and proxy statements under Section 14 of the Exchange Act. In addition, commencing January 1, 2019, our "insiders" are subject to the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act and will be no longer exempt from the requirements of Regulation FD promulgated by the SEC under the Exchange Act. Moreover, beginning January 1, 2019, we were no longer permitted to follow our home country rules in lieu of the corporate governance obligations imposed by Nasdaq, and will be required to comply with the governance practices required of U.S. domestic issuers.

The regulatory and compliance costs associated with the reporting and governance requirements applicable to U.S. domestic issuers may be significantly higher than the costs we previously incurred as a foreign private issuer. As a result, we expect that the loss of foreign private issuer status will increase our legal and financial compliance costs and will make some activities highly time consuming and costly. In addition, we need to develop our reporting and compliance infrastructure and may face challenges in complying with the new requirements applicable to us.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Under the Tax Cuts and Jobs Act, U.S. federal net operating losses, or NOLs, incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal NOLs is limited. It is uncertain if and to what extent various states will conform to the Tax Cuts and Jobs Act. To the extent that we continue to generate taxable losses for United States federal income tax purposes, unused NOLs will carry forward to offset future taxable income (subject to any applicable limitations), if any. Under Sections 382 and 383 of the Code, as amended, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes (such as research tax credits) to offset its post-change income may be limited. We believe we may have triggered an "ownership change" limitation at the completion of our merger with Arcturus Therapeutics, Inc. in November 2017, however we have not completed a study in accordance with Sections 382 and 383 of the Code to determine whether this ownership change has occurred. We may also experience ownership changes in the future as a result of subsequent shifts in our share ownership. As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us. Similar provisions of U.S. state tax law may also apply to limit our use of accumulated state tax attributes, including our state

NOLs. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, even if we attain profitability, we may be unable to use a material portion of our NOLs and other tax attributes, which could negatively impact our future cash flows**.**

We do not intend to pay dividends on our Ordinary Shares so any returns will be limited to the value of our shares.

We have never declared or paid any cash dividends on our Ordinary Shares. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Moreover, the Companies Law, imposes certain restrictions on our ability to declare and pay dividends. See "Comparison of Rights of Israel Shareholders and Delaware Stockholders" of our Annual Report on Form 20-F for the fiscal year ended December 31, 2017 for more information. Any return to shareholders will therefore be limited to the appreciation of their shares.

RISKS RELATED TO ISRAELI LAW AND OUR OPERATIONS IN ISRAEL

Provisions of Israeli law may make it easy for our shareholders to demand that we convene a shareholders meeting, and/or allow shareholders to convene a shareholder meeting without the consent of our management, which may disrupt our management's ability to run our company.

Section 63(b) of the Companies Law may allow any one or more of our shareholders holding at least 5% of our voting rights to demand that we convene an extraordinary shareholders meeting. Also, in the event that we deny to convene an extraordinary shareholders meeting pursuant to such a request, Section 64 of the Companies Law provides that such shareholders may independently convene an extraordinary shareholders meeting and require us to cover the costs. If our shareholders decide to exercise these rights in a way inconsistent with our management's strategic plans, our management's ability to run our company may be disrupted, and this process may entail significant costs to us.

Provisions of Israeli law and our amended and restated articles of association may delay, prevent or otherwise impede a merger with, or an acquisition of, our company, which could prevent a change of control, even when the terms of such a transaction are favorable to us and our shareholders.

Israeli corporate law regulates mergers, requires tender offers for acquisitions of shares above specified thresholds, requires special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to such types of transactions. For example, a merger may not be consummated unless at least 50 days have passed from the date on which a merger proposal is filed by each merging company with the Israel Registrar of Companies and at least 30 days have passed from the date on which the shareholders of both merging companies have approved the merger. In addition, a majority of each class of securities of the target company must approve a merger. Moreover, a tender offer for all of a company's issued and outstanding shares can only be completed if the acquirer receives positive responses from the holders of at least 95% of the issued share capital. Completion of the tender offer also requires approval of a majority of the offerees that do not have a personal interest in the tender offer, unless, following consummation of the tender offer, the acquirer would hold at least 98% of our outstanding shares. Furthermore, the shareholders, including those who indicated their acceptance of the tender offer, may, at any time within six months following the completion of the tender offer, petition an Israeli court to alter the consideration for the acquisition, unless the acquirer stipulated in its tender offer that a shareholder that accepts the offer may not seek such appraisal rights.

Furthermore, Israeli tax considerations may make potential transactions unappealing to us or to our shareholders whose country of residence does not have a tax treaty with Israel exempting such shareholders from Israeli tax. See "Certain Material Israeli Tax Consequences of the Transaction," of our Annual Report on Form 20-F for the fiscal year ended December 31, 2017 for additional information.

Our amended and restated articles of association also contain provisions that could delay or prevent changes in control or changes in our management without the consent of our Board of Directors. These provisions include the following:

- no cumulative voting in the election of directors, which limits the ability of minority shareholders to elect director candidates; and
- the right of our Board of Directors to appoint a director to fill a vacancy created by the expansion of the Board of Directors or the resignation, death or removal of a director, which may prevent shareholders from being able to fill vacancies on our Board of Directors.

As a domiciliary of Israel, our results may be adversely affected by political, economic and military instability in Israel.

As an Israeli company, political, economic and military conditions in Israel may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring countries, the Hamas militant group and the Hezbollah. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations.

In addition, since 2010 political uprisings and conflicts have arisen in various countries in the Middle East. Such instability may lead to deterioration in the political and trade relationships that exist between the State of Israel and certain other countries. Several countries, principally in the Middle East, still restrict doing business with Israel and Israeli companies, and additional countries may impose restrictions on doing business with Israel and Israeli companies if hostilities in Israel or political instability in the region continues or increases. Similarly, Israeli companies are limited in conducting business with entities from countries that are considered to be in a state of war with Israel.

Further, in the past, the State of Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on our operating results, financial conditions or the expansion of our business.

It may be difficult to enforce a judgment of a U.S. court against us and the Israeli experts named herein in Israel or the United States, to assert U.S. securities laws claims in Israel or to serve process on certain of our officers and directors and these experts.

We were incorporated in Israel. Therefore, a judgment obtained against us, or any directors that reside outside of the United States, including a judgment based on the civil liability provisions of the U.S. federal securities laws, may not be collectible in the United States and may not necessarily be enforced by an Israeli court. It also may be difficult for you to effect service of process on these persons in the United States or to assert U.S. securities law claims in original actions instituted in Israel. Additionally, it may be difficult for an investor, or any other person or entity, to initiate an action with respect to U.S. securities laws in Israel. Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws reasoning that Israel is not the most appropriate forum in which to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proven as a fact by expert witnesses, which can be a time consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel that addresses the matters described above. As a result of the difficulty associated with enforcing a judgment against us in Israel, you may not be able to collect any damages awarded by either a U.S. or foreign court.

Your rights and responsibilities as a shareholder will be governed by Israeli law, which differs in some material respects from the rights and responsibilities of shareholders of U.S. companies.

The rights and responsibilities of the holders of our Ordinary Shares are governed by our amended and restated articles of association and by Israeli law. These rights and responsibilities differ in some material respects from the rights and responsibilities of shareholders in typical U.S.-based corporations. In particular, a shareholder of an Israeli company has certain duties to act in good faith and fairness towards the Company and other shareholders, and to refrain from abusing its power in the Company. See Comparison of Rights of Israeli Shareholders and Delaware Stockholders" of our Annual Report on Form 20-F for the fiscal year ended December 31, for additional information. There is limited case law available to assist us in understanding the nature of this duty or the implications of these provisions. These provisions may be interpreted to impose additional obligations and liabilities on holders of our Ordinary Shares that are not typically imposed on stockholders of U.S. corporations.

We are subject to anti-takeover provisions that could delay or prevent our acquisition by another entity.

Provisions of Israeli corporate and tax law and of our amended and restated articles of association may have the effect of delaying, preventing or making more difficult any merger or acquisition of us. In addition, any merger or acquisition of us may require the prior consent of the Israel Innovation Authority (formerly known as the Office of the Chief Scientist), as well as the Investment Center of the Israeli Ministry of Industry, Trade and Employment, or the Investment Center. Israeli law regulates mergers, votes required to approve a merger, acquisition of shares through tender offers and transactions involving significant shareholders. Any of these provisions may make it more difficult to acquire us. Accordingly, our acquisition by another entity could be delayed or prevented even if it would be beneficial to our shareholders.

THE ARCTURUS REDOMICILIATION PROPOSAL

Overview

As explained in more detail below, the Scheme of Arrangement on which we are asking you to vote, in connection with the other steps of the Transaction described in this proxy statement/prospectus, will restructure our corporate group to cause the parent company of the group to be a Delaware corporation. The Transaction cannot occur without the Scheme Shareholders' approval of the Arcturus Redomiciliation Proposal.

On February 7, 2019, the Board approved the Transaction and the entry by Arcturus-Israel into the Exchange Agreement. On February 11, 2019, we submitted a request to the Israel Court to order the convening of the Special Meeting to approve the Scheme of Arrangement. We will hold the Special Meeting to approve the Scheme of Arrangement on , 2019. If we obtain the necessary shareholder approvals, we will request the Israel Court to approve the Scheme of Arrangement. As part of the Exchange Agreement, we will seek the Tax Ruling from the ITA on behalf of our shareholders. Assuming we receive the necessary approvals of the Scheme of Arrangement from Arcturus-Israel's shareholders and the Israel Court and the other conditions to consummate the Transaction are satisfied (including the Tax Ruling from the ITA), the Scheme of Arrangement will become effective and binding in accordance with its terms and conditions.

As a result of the Transaction, the ordinary shareholders of Arcturus-Israel will become stockholders of Arcturus-Delaware and holders of options to purchase ordinary shares of Arcturus-Israel will become optionholders of Arcturus-Delaware and such stockholders' and optionholders' rights will be governed by Delaware law and Arcturus-Delaware's certificate of incorporation and bylaws, in substantially the forms attached hereto as Annex C and Annex D, respectively. In addition, as part of the Transaction, Arcturus-Israel intends to transfer all of its holdings of shares in Private Arcturus to Arcturus-Delaware by way of a dividend distribution in kind so that Private Arcturus will become a wholly owned subsidiary of Arcturus-Delaware. The distribution may be executed, at any time close to or after the execution date of the transaction, but no later than December 31, 2019, subject to Arcturus-Israel discretion, which can also elect not to execute such distribution.

Background and Reasons for the Transaction

On November 15, 2017, our predecessor company, Alcobra Ltd. ("**Alcobra**"), now named Arcturus Therapeutics Ltd., completed its merger with Arcturus Therapeutics, Inc. ("**Private Arcturus**"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of September 27, 2017, among Alcobra, Aleph MergerSub, Inc. and Private Arcturus (as amended, the "**merger agreement**"). In connection with the merger, Alcobra agreed to acquire all of the outstanding common stock of Private Arcturus in exchange for issuing to the Private Arcturus stockholders an aggregate 6,631,712 of Alcobra's ordinary shares, par value 0.07 NIS per share, after giving effect to a 1-for-7 reverse split effected immediately prior to the merger. As a result of the merger, Private Arcturus became a wholly-owned subsidiary of Alcobra. While Alcobra was the legal acquirer in the transaction, Private Arcturus was deemed the accounting acquirer. Immediately after giving effect to the merger, on November 15, 2017, Alcobra changed its name to Arcturus Therapeutics Ltd.

Therefore, we have been incorporated in Israel since February 7, 2018. While our incorporation in Israel has served us and our shareholders well, there are compelling reasons that support restructuring our corporate group to cause the parent company of our group to be an entity organized in the United States at this time.

Our operations are focused in the United States, and we expect to continue to invest in our operations in the United States. All of Arcturus' employees and our operating assets are in the United States. Further, we believe that a significant majority of our shareholders are U.S.-based investors. As a result, we think it makes sense to have our parent company based in the United States.

Following a thorough review, we have determined that having our ultimate parent company incorporated in the United States is best for us, our shareholders and our employees.

After considering various factors, our board of directors determined that it was advisable to proceed with the Transaction. Our board of directors' determination that Delaware is the preferred jurisdiction of incorporation of the parent of the Arcturus group was based on many factors, including the following:

- Delaware offers predictable and well-established corporate laws;
- Delaware has a well-developed legal system which we believe encourages high standards of corporate governance and provides stockholders with substantial rights;
- the perception of a Delaware corporation among regulatory authorities, investors and creditors as being highly favorable; and
- Delaware corporate law provides significant flexibility around corporate transactions, including the issuance of equity and the payment of dividends, while at the same time protecting the rights of stockholders.

We cannot assure you that the anticipated benefits of the Transaction will be realized. In addition, despite the potential benefits described above, the Transaction will expose you and us to potential risks, including relating to future income tax policy in the United States. Please see the discussion under "Risk Factors."

The Board has considered both the potential advantages of the Transaction and these potential risks and has unanimously approved the Scheme of Arrangement and recommends that shareholders vote for the approval of the Scheme of Arrangement.

Amendment

The Scheme of Arrangement may be amended, modified or supplemented at any time before or after its approval by the shareholders of Arcturus-Israel at the Special Meeting. However, after approval, no amendment, modification or supplement may be made or effected that legally requires further approval by Arcturus-Israel shareholders without obtaining such approval.

Conditions to Consummation of the Transaction

The Transaction will not be completed unless the following conditions are satisfied:

- the Scheme of Arrangement is approved by the requisite vote of the shareholders of Arcturus-Israel at the Special Meeting;
- the requisite court order approving the Scheme of Arrangement is obtained from the Israel Court;
- the Tax Ruling has been received from the ITA;
- no statute, rule or regulation is enacted or promulgated by any governmental entity of competent jurisdiction which prohibits or makes illegal the consummation of the Scheme of Arrangement;
- the Registration Statement on Form S-4 of which this joint proxy statement/prospectus forms a part shall have become effective in accordance with the provisions of the Securities Act of 1933, as amended and shall not be subject to any stop order or proceeding (or threatened proceeding by the Securities and Exchange Commission) seeking a stop order with respect to this Registration Statement on Form S-4.
- the NASDAQ Listing Application shall have been approved and the shares of Arcturus-Delaware to be issued in the Transaction shall have been approved for listing on NASDAQ as of the Effective Time, in each case subject to official notice of issuance; and
- no order or injunction of a court of competent jurisdiction shall be in effect that prevents the consummation of the Scheme of Arrangement.

Approval of the Scheme of Arrangement by the Israel Court

Arcturus-Israel has made an application to the Israel Court for an order to convene the Special Meeting. Subsequent and subject to approval of the Arcturus Redomiciliation Proposal by the shareholders of Arcturus-Israel at the Special Meeting, Arcturus-Israel must apply for the Israel Court Order for its approval of the Scheme of Arrangement. If (i) the Israel Court Order is granted, and (ii) the conditions to closing contained in the Exchange Agreement are satisfied, the Scheme of Arrangement will become effective on the date that the Israel Court Order is granted.

The approval by the shareholders of Arcturus-Israel and/or the Israel Court of the Scheme of Arrangement shall remain valid notwithstanding any change in our business or financial condition or any transactions undertaken by us (including any changes arising as a result of our proposed acquisition of Qualcomm).

Effective Date of the Transaction

Assuming we receive the necessary approvals from Arcturus-Israel's shareholders and the Israel Court and the other conditions to consummate the Transaction are satisfied, the Scheme of Arrangement will become effective and binding in accordance with its terms and conditions. We currently expect to complete the Transaction no later than May 31, 2019 (the "**Long Stop Date**").

In accordance with the terms of the Exchange Agreement, Arcturus-Israel, without obtaining any further approval of Arcturus-Israel shareholders, may select the effective time of the Transaction (including the Scheme of Arrangement), provided the effective time occurs on or prior to the Long-Stop Date, notwithstanding Arcturus-Israel shareholder or Israel Court approval of the Scheme of Arrangement and/or the satisfaction of all of the other conditions to the Transaction.

Subject to the satisfaction of the conditions set forth in the Exchange Agreement, we will be consummate the Transaction by the Long-Stop Date. However, if the conditions set forth in the Exchange Agreement are not satisfied by such date, the Scheme of Arrangement will lapse pursuant to its terms and the Transaction will not be effected.

Management of Arcturus-Delaware

When the Transaction is completed, the executives and directors of Arcturus-Israel immediately prior to the completion of the Transaction will be the executives and directors of Arcturus-Delaware. Arcturus-Delaware's certificate of incorporation and bylaws, as they will be in effect after the Transaction, provide for a single class of directors, just as Arcturus-Israel currently has, and Arcturus-Delaware's directors will be subject to re-election at the next annual meeting of stockholders of Arcturus-Delaware following the completion of the Transaction.

Indemnification Agreements

The Companies Law provides that Israeli companies may indemnify their office holders[3] and purchase an insurance policy to cover certain liabilities, if provisions for that purpose are included in their articles of association. Our Articles of Association allow us to indemnify and insure our office holders to the fullest extent permitted by the Companies law.

[3] Office Holders are defined by the Companies Law as: a director, general manager, chief business manager, deputy general manager, vice-general manager, any person filling any of these positions in a company even if he holds a different title, and any other manager directly subordinate to the general manager;

Office Holders' Exemption

Under the Companies Law, an Israeli company may not exempt an office holder from liability for a breach of his or her duty of loyalty, but may exempt in advance an office holder from his or her liability to the company, in whole or in part, for a breach of his or her duty of care (except in connection with distributions), provided that the articles of association allow it to do so. Our Articles of Association allow us to exempt our office holders to the fullest extent permitted by the Companies law.

Office Holders' Insurance

Our Articles of Association provide that, subject to the provisions of the Companies Law, we may enter into a contract for the insurance of all or part of the liability of any of our office holders imposed on the office holder in respect of an act or omission performed by him or her in his or her capacity as an office holder, regarding each of the following:

- a breach of his or her duty of care to us or to another person;
- a breach of his or her duty of loyalty to us, provided that the office holder acted in good faith and had reasonable cause to assume that his or her act would not prejudice our interests;
- a financial liability imposed upon him or her in favor of another person; and/or
- any other event, occurrence or circumstance in respect of which we may lawfully insure an office holder.

Without derogating from the aforementioned, subject to the provisions of the Companies Law and the Israeli Securities Law, 5728-1968 (the "**Israeli Securities Law**"), we may also enter into a contract to insure an office holder, in respect of expenses, including reasonable litigation expenses and legal fees, incurred by an office holder in relation to an administrative proceeding instituted against such office holder or payment required to be made to an injured party, pursuant to certain provisions of the Israeli Securities Law.

Office Holder's Indemnification

Our Articles of Association provide that, subject to the provisions of the Companies Law and the Israeli Securities Law, we may indemnify any of our office holders for an obligation or expense specified below, imposed on or incurred by the office holder in respect of an act or omission performed in his or her capacity as an office holder, as follows:

- a financial liability imposed on him or her in favor of another person by any judgment, including a settlement or an arbitration award approved by a court.
- reasonable litigation expenses, including attorney's fees, incurred by the office holder as a result of an investigation or proceeding instituted against him by a competent authority which concluded without the filing of an indictment against him and without the imposition of any financial liability in lieu of criminal proceedings, or which concluded without the filing of an indictment against him but with the imposition of a financial liability in lieu of criminal proceedings concerning a criminal offense that does not require proof of criminal intent or in connection with a financial sanction (the phrases "proceeding concluded without the filing of an indictment" and "financial liability in lieu of criminal proceeding" shall have the meaning ascribed to such phrases in section 260(a)(1a) of the Companies Law);
- reasonable litigation expenses, including attorneys' fees, expended by an office holder or charged to the office holder by a court, in a proceeding instituted against the office holder by the Company or on its behalf or by another person, or in a criminal charge from which the office holder was acquitted, or in a criminal proceeding in which the office holder was convicted of an offense that does not require proof of criminal intent;

- expenses, including reasonable litigation expenses and legal fees, incurred by an office holder in relation to an administrative proceeding instituted against such office holder, or payment required to be made to an injured party, pursuant to certain provisions of the Securities Law; and/or
- any other event, occurrence or circumstance in respect of which we may lawfully indemnify an office holder.

An Israeli company may undertake to indemnify an office holder as aforesaid: (a) prospectively, provided that, in respect of the first act (financial liability) the undertaking is limited to events which in the opinion of the board of directors are foreseeable in light of the company's actual operations when the undertaking to indemnify is given, and to an amount or criteria set by the board of directors as reasonable under the circumstances, and further provided that such events and amount or criteria are set forth in the indemnification undertaking; and (b) retroactively.

Limitations on Insurance and Indemnification

The Companies Law provides that a company may not exempt or indemnify an office holder nor enter into an insurance contract which would provide coverage for any monetary liability incurred as a result of any of the following:

- a breach by the office holder of his or her duty of loyalty, except that the company may enter into an insurance contract or indemnify an office holder if the office holder acted in good faith and had a reasonable basis to believe that the act would not prejudice the company;
- a breach by the office holder of his or her duty of care, if such breach was intentional or reckless, but unless such breach was solely negligent;
- any act or omission intended to derive an illegal personal benefit; or
- any fine levied against the office holder.

In addition, under the Companies Law, exemption and indemnification of, and procurement of insurance coverage for, our office holders must be approved by our Compensation Committee and our Board of Directors and, with respect to an office holder who is CEO or a director, also by our shareholders. However, according to regulations promulgated under the Companies Law with respect to relief in approval of certain related party transactions, shareholders' and Board approvals for the procurement of such insurance coverage are not required if the insurance policy is approved by our Compensation Committee and: (i) the terms of such policy are within the framework for insurance coverage as approved by our shareholders and set forth in our Compensation Policy; (ii) the premium paid under the insurance policy is at fair market value; and (iii) the insurance policy does not and may not have a substantial effect on the Company's profitability, assets or obligations.

Each of the Arcturus-Delaware certificate of incorporation and bylaws will provide that we are required to indemnify the directors and officers of Arcturus-Delaware, in each case to the fullest extent permitted by Delaware law. The Arcturus-Delaware bylaws will also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered into agreements with the Arcturus-Israel directors, officers and other employees and expect to enter into agreements to indemnify the Arcturus-Delaware directors, executive officers and other employees as determined by the Arcturus-Delaware board of directors. With specified exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding to the fullest extent permitted by applicable law.

In connection with the Transaction, we expect that we enter into a customary indemnification agreement with each of Arcturus-Delaware's directors and certain officers, as well as with individuals serving as directors or officers of our subsidiaries.

Interests of Certain Persons in the Transaction

Except for the indemnification arrangements described above, no person who has been a director or executive officer of Arcturus-Israel at any time since the beginning of the last fiscal year, or any associate of any such person, has any substantial interest in the Transaction, except for any interest arising from his or her ownership of securities of Arcturus-Israel or the Partnership.

Regulatory Matters

Other than court approval of the Scheme of Arrangement, we are not aware of any other governmental approvals or actions that are required to complete the Transaction other than compliance with U.S. federal and state securities laws and Israel and Delaware corporate law. We do not believe that any significant regulatory approvals will be required to effect the Transaction.

No Appraisal Rights

Once the Arcturus Redomiciliation Proposal is approved by the requisite Scheme Shareholders, is approved by the Israel Court, the Scheme of Arrangement becomes effective and will be binding on all shareholders of Arcturus. Holders of Arcturus-Israel ordinary shares may file an objection with the Israel Court against the approval of the Scheme of Arrangement, but no appraisal or dissenting rights are available to such holders in connection with a scheme of arrangement effected under Israel law.]

Action Required to Transfer Arcturus-Israel Ordinary Shares and Receive Arcturus-Delaware Shares of Common Stock.

Assuming the Transaction becomes effective, your Arcturus-Israel ordinary shares will be exchanged by Arcturus-Delaware in consideration of shares of common stock of Arcturus-Delaware, which will be issued to you in uncertificated book-entry form. Arcturus-Israel stock certificates outstanding immediately prior to the effective time of the Transaction will no longer be evidence of title of Arcturus-Israel ordinary shares represented by such certificates, and following the Transaction, will only represent the right to receive a corresponding number of uncertificated book-entry shares of common stock of Arcturus-Delaware. Our transfer agent will request that you return such share certificates for cancellation, together with a properly completed and executed letter of transmittal, in exchange for shares of common stock of Arcturus-Delaware following completion of the Transaction. Arcturus-Israel ordinary shares held in "street name" through a bank, broker, custodian or other nominee will be automatically exchanged for uncertificated book-entry shares of common stock of Arcturus-Delaware without any action required on the part of the beneficial holder of such ordinary shares.

Equity Plans

If the Transaction is completed, Arcturus-Delaware will adopt an equity incentive plan and issue new options to purchase Arcturus-Delaware common stock in the same amounts and under substantially the same terms as the options issued to purchase ordinary shares of Arcturus-Israel common stock you currently hold. Shareholder approval of the Transaction will also constitute shareholder approval of the adoption of the equity incentive plans by Arcturus-Delaware and issuance of the options to purchase Arcturus-Delaware common stock to current holders of options to purchase ordinary shares of Arcturus-Israel as contemplated by this proxy statement/prospectus.

Holders of outstanding options may be subject to tax as a result of the exchange of options to purchase Arcturus-Israel ordinary shares for options to purchase Arcturus-Delaware shares of common stock as of the

consummation of the Transaction, depending on the country where the holders are citizens or tax residents or the country where they resided during the life of such equity awards. In general, however, U.S. taxpayers should not recognize ordinary income at the time Arcturus-Delaware issues their equity awards. Tax withholding and/or reporting may be required by Arcturus-Delaware or one of its affiliates and/or the holder of the applicable equity award, and certain employer social insurance contributions or other taxes may be due as a result of the conversion of the equity awards. Depending on the country where the holders are citizens or residents or the country where they resided during the life of the Arcturus-Israel awards, the conversion of equity awards may trigger certain regulatory filings or notices to employees concerning the tax or regulatory consequences of the Transaction.

Stock Exchange Listing

Arcturus-Israel's ordinary shares are currently listed on NASDAQ. There is currently no established public trading market for the shares of common stock of Arcturus-Delaware. We will submit a notification form with NASDAQ and expect that, immediately following the consummation of the Transaction, the Arcturus-Delaware shares of common stock will be listed on NASDAQ under the symbol "ARCT," the same symbol under which your Arcturus-Israel ordinary shares are currently listed.

Accounting Treatment of the Transaction

Under U.S. GAAP, the Scheme of Arrangement represents a transaction between entities under common control. Assets and liabilities are transferred at carrying value between entities under common control. Accordingly, the assets and liabilities of Arcturus-Delaware will be reflected at the same carrying amounts as in the accounts of Arcturus-Israel at the effective time of the Scheme of Arrangement.

Effect of the Transaction on Reporting Obligations of the Arcturus Corporate Group

Upon completion of the Transaction, Arcturus-Delaware will be subject to the same reporting requirements of the SEC, the mandates of the Sarbanes-Oxley Act and the applicable corporate governance rules of NASDAQ as Arcturus-Israel before the Transaction, and Arcturus-Delaware will continue to report our consolidated financial results in U.S. dollars and in accordance with U.S. GAAP. Arcturus-Delaware will continue to file reports on Form 10-K, 10-Q and 8-K with the SEC and comply with the proxy rules, as we currently do. We will also comply with any additional reporting requirements of Delaware law.

TAXATION

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS OF THE SCHEME OF ARRANGEMENT TO HOLDERS OF ARCTURUS-ISRAEL ORDINARY SHARES

The following discussion is a summary of the material U.S. federal income tax consequences to U.S. Holders and to Non-U.S. Holders (each as defined below) of (i) transferring Arcturus-Israel ordinary shares to Arcturus-Delaware for Arcturus-Delaware shares of common stock pursuant to the Scheme of Arrangement and (ii) owning and disposing of Arcturus-Delaware shares of common stock that are received pursuant to the Scheme of Arrangement. This discussion is based on and subject to the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), the U.S. Treasury Regulations promulgated thereunder ("**Regulations**"), published guidance of the U.S. Internal Revenue Service (the "**IRS**") and court decisions, in each case, as of the date hereof, all of which are subject to change, possibly with retroactive effect, and to differing interpretations. The following discussion assumes that the Scheme of Arrangement will be consummated as described in this proxy statement/prospectus and applies only to U.S. Holders and Non-U.S. Holders that hold their Arcturus-Israel ordinary shares, and that will hold their Arcturus-Delaware shares of common stock received pursuant to the Scheme of Arrangement, as "capital assets" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not constitute tax advice and does not address all aspects of U.S. federal income taxation that may be relevant to any particular holders in light of their personal circumstances, including any tax consequences arising under the tax on net investment income, or to any holders subject to special treatment under the Code, such as:

- banks, thrifts, mutual funds and other financial institutions;
- real estate investment trusts and regulated investment companies;
- traders in securities who elect to apply a mark-to-market method of accounting;
- brokers or dealers in securities;
- tax-exempt organizations or governmental organizations;
- insurance companies;
- dealers or brokers in securities or foreign currency;
- individual retirement and other deferred accounts;
- U.S. Holders whose functional currency is not the U.S. dollar;
- U.S. expatriates and former citizens or long-term residents of the United States subject to Sections 877 or Section 877A of the Code;
- "passive foreign investment companies" or "controlled foreign corporations," and corporations that accumulate earnings to avoid U.S. federal income tax;
- persons subject to the alternative minimum tax;
- persons who hold their shares as part of a straddle, hedging, conversion, constructive sale or other risk reduction transaction;
- persons who purchase or sell their shares as part of a wash sale for tax purposes;
- "S corporations," partnerships or other entities or arrangements classified as partnerships for U.S. federal income tax purposes, or other pass-through entities (and investors therein);
- persons who received their shares through the exercise of employee stock options or otherwise as compensation or through a tax-qualified retirement plan;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to Arcturus-Delaware shares of common stock being taken into account in a financial statement; and

- persons who own (directly, indirectly or constructively) five percent or more, by vote or value, of Arcturus-Israel stock or, after completion of the Scheme of Arrangement, Arcturus-Delaware shares of common stock.

Unless otherwise specifically indicated, this discussion does not address the U.S. federal income tax consequences of transactions effectuated prior or subsequent to, or concurrently with, the Scheme of Arrangement. This discussion also does not address any considerations under the U.S. federal tax laws other than those pertaining to the income tax (for example, it does not address estate or gift taxes), nor does it address any state, local or non-U.S. tax considerations. We do not intend to seek any rulings from the IRS with respect to the Scheme of Arrangement, and there can be no assurance that the IRS will not take a position contrary to the tax consequences described herein or that such a contrary position would not be sustained by a court.

For purposes of this discussion, a "**U.S. Holder**" means a beneficial owner of Arcturus-Israel ordinary shares or, after the completion of the Scheme of Arrangement, Arcturus-Delaware shares of common stock received in the Scheme of Arrangement, that for U.S. federal income tax purposes is:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if (i) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (ii) the trust has a valid election in effect under applicable Regulations to be treated as a U.S. person for U.S. federal income tax purposes.

For purposes of this discussion, a "**Non-U.S. Holder**" means a beneficial owner of Arcturus-Israel ordinary shares or, after the completion of the Scheme of Arrangement, Arcturus-Delaware shares of common stock received in the Scheme of Arrangement, that is not a U.S. Holder (except that, with respect to an entity (or other arrangement taxable as a partnership for U.S. federal income tax purposes), a "**Non-U.S. Holder**" refers to any partner in such partnership that is not a U.S. Holder as defined in the previous sentence).

If a partnership, including for this purpose any arrangement or entity that is treated as a partnership for U.S. federal income tax purposes, holds Arcturus-Israel ordinary shares or, after the completion of the Scheme of Arrangement, Arcturus-Delaware shares of common stock, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. A holder that is a partnership for U.S. federal income tax purposes and the partners in such partnership are urged to consult their tax advisors about the U.S. federal income tax consequences of the Scheme of Arrangement and of the ownership and disposition of Arcturus-Delaware shares of common stock.

Arcturus-Israel is treated as a U.S. corporation for U.S. federal income tax purposes pursuant to Section 7874 of the Code, and this discussion assumes that Arcturus-Israel is properly classified as a U.S. corporation for U.S. federal income tax purposes.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. HOLDERS OF ARCTURUS-ISRAEL ORDINARY SHARES OR, AFTER THE COMPLETION OF THE SCHEME, ARCTURUS-DELAWARE SHARES OF COMMON STOCK SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE SCHEME OF ARRANGEMENT AND OF THE OWNERSHIP AND DISPOSITION OF ARCTURUS-DELAWARE SHARES OF COMMON STOCK IN LIGHT OF THEIR PARTICULAR CIRCUMSTANCES, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER U.S. FEDERAL TAX LAWS OTHER THAN THOSE PERTAINING TO INCOME TAX, INCLUDING ESTATE OR GIFT TAX LAWS, OR UNDER ANY STATE, LOCAL OR NON-U.S. TAX LAWS OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Characterization of the Exchange of Arcturus-Israel Ordinary Shares for Arcturus-Delaware Shares of Common Stock Pursuant to the Scheme of Arrangement

For U.S. federal income tax purposes, the Scheme of Arrangement is expected to qualify as a tax-deferred exchange under Section 351 of the Code. The Scheme of Arrangement is not conditioned on the receipt of a tax opinion, and we do not intend to request a ruling from the IRS regarding the U.S. federal income tax treatment of the Scheme of Arrangement. Consequently, no assurance can be given that the IRS will not challenge the qualification of the Scheme of Arrangement as a tax-deferred exchange under Section 351 of the Code, or that a court would not sustain such challenge.

Material U.S. Federal Income Tax Consequences of the Scheme of Arrangement to U.S. Holders of Arcturus-Israel Ordinary Shares

Receipt of Arcturus-Delaware Shares of Common Stock

Assuming that the Scheme of Arrangement qualifies as a tax-deferred exchange under Section 351 of the Code, a U.S. Holder that transfers Arcturus-Israel ordinary shares for Arcturus-Delaware shares of common stock pursuant to the Scheme of Arrangement should not recognize any gain or loss with respect to such exchange. Such U.S. Holder will have an adjusted tax basis in the Arcturus-Delaware shares of common stock received pursuant to the Scheme of Arrangement equal to the adjusted tax basis of the Arcturus-Israel ordinary shares surrendered in exchange therefor by that U.S. Holder pursuant to the Scheme of Arrangement. The holding period for Arcturus-Delaware shares of common stock received pursuant to the Scheme of Arrangement will include the U.S. Holder's holding period for the Arcturus-Israel ordinary shares surrendered in exchange therefor.

U.S. Holders should consult their tax advisors about any reporting requirements and information statements that could be applicable with respect to the Scheme of Arrangement and any potential consequences, including penalties, associated with a failure to satisfy such requirements.

Material U.S. Federal Income Tax Consequences to U.S. Holders of Owning and Disposing of Arcturus-Delaware Shares of Common Stock Received in the Scheme of Arrangement

Dividends and Other Distributions on Arcturus-Delaware Shares of Common Stock

Any distribution made by Arcturus-Delaware to a U.S. Holder with respect to Arcturus-Delaware shares of common stock will generally be includible in the U.S. Holder's gross income, in the year actually or constructively received, as a dividend to the extent that such distribution is paid out of Arcturus-Delaware's current or accumulated earnings and profits (as determined under U.S. federal income tax principles). To the extent that the amount of the distribution exceeds Arcturus-Delaware's current and accumulated earnings and profits (as determined under U.S. federal income tax principles), such excess will be treated first as a tax-free return of the U.S. Holder's tax basis in the Arcturus-Delaware shares of common stock, and then, to the extent such excess amount exceeds the U.S. Holder's tax basis in the Arcturus-Delaware shares of common stock, as capital gain. Subject to applicable limitations and requirements, dividends received on Arcturus-Delaware's shares of common stock generally should be eligible for the "dividends received deduction" available to corporate shareholders. A dividend paid by Arcturus-Delaware to certain non-corporate U.S. Holders, including individuals, generally will be subject to taxation at preferential rates if certain holding period requirements are met.

Dispositions of Arcturus-Delaware Shares of Common Stock

A U.S. Holder will generally recognize taxable gain or loss on any sale, taxable exchange or other taxable disposition of Arcturus-Delaware shares of common stock equal to the difference between the amount realized

for such Arcturus-Delaware shares of common stock and the U.S. Holder's adjusted tax basis in such Arcturus-Delaware shares of common stock. Any such gain or loss will generally be capital gain or loss and will be long-term capital gain or loss if, on the date of the disposition, the U.S. Holder has a holding period in such Arcturus-Delaware shares of common stock that exceeds one year. Long-term capital gains derived by certain non-corporate U.S. Holders, including individuals, are generally subject to taxation at preferential rates. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding

Dividend payments with respect to Arcturus-Delaware shares of common stock and proceeds of a disposition of Arcturus-Delaware shares of common stock will generally be subject to information reporting to the IRS and may be subject to U.S. backup withholding (currently, at a rate of 24%) unless a U.S. Holder furnishes such U.S. Holder's correct U.S. taxpayer identification number (generally on IRS Form W-9) and complies with other applicable certification requirements, or otherwise establishes an exemption. Backup withholding is not an additional tax. Amounts withheld under the backup withholding rules will be credited against a U.S. Holder's federal income tax liability, and may entitle a U.S. Holder to a refund, provided that the required information is furnished to the IRS in a timely manner.

Material U.S. Federal Income Tax Consequences of the Scheme of Arrangement to Non-U.S. Holders of Arcturus-Israel Ordinary Shares

Assuming that the transfer of Arcturus-Israel ordinary shares for Arcturus-Delaware shares of common stock pursuant to the Scheme of Arrangement qualifies as a tax-deferred exchange under Section 351 of the Code, a Non-U.S. Holder that receives Arcturus-Delaware shares of common stock pursuant to the Scheme of Arrangement will not recognize any gain or loss with respect to the receipt of such Arcturus-Delaware shares of common stock for U.S. federal income tax purposes. Such Non-U.S. Holder will, for U.S. federal income tax purposes, have an adjusted tax basis in the Arcturus-Delaware shares of common stock received pursuant to the Scheme of Arrangement equal to the adjusted tax basis of the Arcturus-Israel ordinary shares surrendered in exchange therefor by that Non-U.S. Holder pursuant to the Scheme of Arrangement. The holding period for Arcturus-Delaware shares of common stock received pursuant to the Scheme of Arrangement will include the Non-U.S. Holder's holding period for the Arcturus-Israel ordinary shares surrendered in exchange therefor.

Non-U.S. Holders should consult their tax advisors about reporting requirements and information statements that could be applicable with respect to the Scheme of Arrangement and any potential consequences, including penalties, associated with a failure to satisfy such requirements.

Material U.S. Federal Income Tax Considerations to Non-U.S. Holders of Owning and Disposing of Arcturus-Delaware Shares of Common Stock Received in the Scheme of Arrangement

Dividends and Other Distributions on Arcturus-Delaware Shares of Common Stock

Any distribution made by Arcturus-Delaware to a Non-U.S. Holder with respect to Arcturus-Delaware shares of common stock will generally constitute a dividend for U.S. federal income tax purposes to the extent that such distribution is paid out of Arcturus-Delaware's current or accumulated earnings and profits (as determined under U.S. federal income tax principles). To the extent that the amount of the distribution exceeds Arcturus-Delaware's current and accumulated earnings and profits (as determined under U.S. federal income tax principles), such excess will be treated first as a tax-free return of the Non-U.S. Holder's tax basis in the Arcturus-Delaware shares of common stock, and then, to the extent such excess amount exceeds the Non-U.S. Holder's tax basis in the Arcturus-Delaware shares of common stock, as capital gain and will be treated as described below under "Dispositions of Arcturus-Delaware Shares of Common Stock."

Subject to the discussion below regarding effectively connected income, dividends paid to a Non-U.S. Holder with respect to such Non-U.S. Holder's Arcturus-Delaware shares of common stock generally will be

subject to U.S. federal withholding tax at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence). Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty and the procedures for claiming such benefits.

Dividends paid to a Non-U.S. Holder with respect to Arcturus-Delaware shares of common stock that are effectively connected with its conduct of a trade or business within the United States (and, if required by an applicable tax treaty, are attributable to a U.S. permanent establishment or a fixed base maintained by such Non-U.S. Holder) will generally be exempt from the U.S. federal withholding tax, as described above, if the Non-U.S. Holder complies with applicable certification and disclosure requirements (generally including provision of a valid IRS Form W-8ECI (or applicable successor form) certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States). Instead, such dividends generally will be subject to U.S. federal income tax on a net income basis, at regular U.S. federal income tax rates as would apply if such holder were a U.S. person (as defined in the Code). Any U.S. effectively connected income received by a Non-U.S. Holder that is classified as a corporation for U.S. federal income tax purposes, may also be subject to an additional "branch profits tax" at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty).

A Non-U.S. Holder of Arcturus-Delaware shares of common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. Holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty and the specific methods available to them to satisfy these requirements.

Dispositions of Arcturus-Delaware Shares of Common Stock

Subject to the discussions below relating to backup withholding and foreign accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale, taxable exchange or other taxable disposition of Arcturus-Delaware shares of common stock, unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, such gain is attributable to a permanent establishment or fixed base maintained by the Non-U.S. Holder in the United States);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- the Arcturus-Delaware shares of common stock constitute a U.S. real property interest by reason of Arcturus-Delaware being, or having been, a U.S. real property holding corporation ("**USRPHC**") for U.S. federal income tax purposes at any applicable time within the shorter of the five-year period preceding the Non-U.S. Holder's disposition of the Arcturus-Delaware shares of common stock or the Non-U.S. Holder's holding period for the Arcturus-Delaware shares of common stock and, provided that the Arcturus-Delaware shares of common stock are regularly traded in an established securities market within the meaning of applicable Regulations, the Non-U.S. Holder has held, directly or constructively, at any time during said period, more than 5% of such stock.

Gain that is effectively connected with the conduct of a trade or business in the United States generally will be subject to U.S. federal income tax on a net income tax basis, at regular U.S. federal income tax rates. If the Non-U.S. Holder is a non-U.S. corporation, the branch profits tax described above also may apply to such effectively connected gain. An individual Non-U.S. Holder who is subject to U.S. federal income tax because the Non-U.S. Holder was present in the United States for 183 days or more during the year of sale or other disposition of the Arcturus-Delaware shares of common stock will be subject to a flat 30% tax (or such lower

rate as may be specified by an applicable income tax treaty) on the gain derived from such sale or other disposition, which may be offset by certain U.S. source capital losses, if any. We believe that we are not and we do not anticipate becoming a USRPHC for U.S. federal income tax purposes.

Information Reporting and Backup Withholding

Payments of dividends on Arcturus-Delaware shares of common stock will not be subject to backup withholding, provided that the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either properly certifies its non-U.S. status, or otherwise establishes an exemption. However, information reporting will apply in connection with any dividends on Arcturus-Delaware shares of common stock paid to a Non-U.S. Holder, regardless of whether any tax was actually withheld.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of Arcturus-Delaware shares of common stock by a Non-U.S. Holder effected by or through the U.S. office of any broker, U.S. or non-U.S., unless the holder certifies its status as a Non-U.S. Holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. Holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 through 1474 of the Code (commonly referred to as the "Foreign Account Tax Compliance Act" or "**FATCA**") on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or (subject to the caveat in the following paragraph) gross proceeds from the sale or other disposition of any property of a type which can produce U.S. source interest or dividends ("**FATCA Property**"), such as Arcturus-Delaware shares of common stock, paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. Such certification or exemption must typically be evidenced by a Non-U.S. Holder's delivery of a properly executed IRS Form W-8BEN-E. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States relating to FATCA may be subject to different rules.

Under relevant Regulations and administrative guidance, withholding under FATCA currently applies to payments of dividends on Arcturus-Delaware shares of common stock, and will apply (subject to the caveat in

the following sentence) to payments of gross proceeds from the sale or other disposition of FATCA Property with respect to sales or dispositions effected on or after January 1, 2019. Notwithstanding the foregoing, the IRS has issued proposed Regulations upon which taxpayers may generally rely, that exclude payments of gross proceeds from the sale or other disposition of FATCA Property from the application of the withholding tax imposed under FATCA.

Shareholders should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in Arcturus-Delaware shares of common stock.

THE U.S. FEDERAL INCOME TAX CONSIDERATIONS SUMMARIZED ABOVE ARE FOR GENERAL INFORMATION ONLY. EACH SHAREHOLDER SHOULD CONSULT ITS TAX ADVISOR AS TO THE PARTICULAR CONSEQUENCES THAT MAY APPLY TO SUCH SHAREHOLDER.

CERTAIN MATERIAL ISRAELI TAX CONSEQUENCES OF THE TRANSACTION

Material Israeli Tax Consequences

The following is a summary discussion of certain Israeli tax considerations in connection with the Transaction. The following summary is included for general information purposes only and is based upon current Israeli tax law. No assurance can be given that new or future legislation, regulations, or interpretations will not significantly change the tax considerations described below, or that any such change may apply retroactively. This summary does not discuss all the material aspects of Israeli tax consequences that may apply to certain holders of Arcturus-Israel ordinary shares in light of their particular circumstances, such as investors that do not hold their Arcturus-Israel ordinary shares as a capital asset, investors that are subject to special tax rules, or other investors referred to below.

Tax matters are very complicated, and the Israeli tax consequences of the Transaction for Israeli shareholders of Arcturus-Israel will depend on their particular situation. You are encouraged to consult your tax advisors regarding the specific Israeli tax consequences of the Transaction applicable to you, including tax return reporting requirements; the applicability of federal, state, local, and foreign tax laws; and the effect of any proposed change in the tax laws. This discussion is not intended to be a complete analysis or description of all potential tax consequences of the Transaction.

Israeli law imposes a capital gains tax on the sale of capital assets by Israeli residents and on the sale of Israeli assets or assets deemed to be located in Israel by non-residents of Israel. In general, under the Israeli Tax Ordinance, the transfer by shareholders of Arcturus-Israel of ordinary shares to Arcturus-Delaware is deemed to be a sale of capital assets and therefore gives rise to a taxable event. Consequently, unless a specific exemption is available, either under the Israeli Tax Ordinance or a treaty for the avoidance of double taxation applicable to non-residents of Israel, the exchange of shares will be subject to tax in Israel.

Under the Israeli Tax Ordinance, the tax rate applicable to capital gains derived from the disposition of Arcturus-Israel ordinary shares in the Transaction is 25% for Israeli individuals (or 30% in case of a shareholder who claims a deduction for financing expenses in connection with such shares or who is considered a “Significant Shareholder” at any time during the 12-month period preceding such disposition, i.e. such shareholder alone or together with such person’s relative or another person who collaborates with such person on a permanent basis holds, directly or indirectly, at least 10% of any “means of control” in the company in question). In addition, an individual may be subject to an “Additional Tax” at the rate of 3% on his income exceeding NIS 649,560 (in 2019). However, the foregoing tax rates will not apply to individuals who (i) are dealers in securities and/or (ii) acquired their shares prior to an initial public offering (and may be subject to a different tax arrangement). A corporate shareholder is generally subject to tax at the Israeli corporate tax rate, which is 23% in 2019.

According to the Israeli Tax Ordinance, non-Israeli residents should be exempt from Israeli capital gains tax on any gains derived from the sale of their Arcturus-Israel ordinary shares pursuant to the Transaction, provided that (i) they purchased the Arcturus-Israel ordinary shares upon or after Arcturus-Israel's initial public offering in August 2013, (ii) such gains are not derived from a permanent establishment of such shareholders in Israel, and (iii) they obtained an exemption certificate from the Israel Tax Authority. However, a non-Israeli corporate shareholder will not be entitled to such exemption if Israeli residents (i) have, directly or indirectly, a controlling interest of more than 25% in such non-Israeli corporation, whether directly or indirectly, by themselves or with others; or (ii) are the beneficiaries of or are entitled to 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly.

In addition, under the US-Israel Tax Treaty (the "Treaty"), the sale, exchange, or other disposition of Arcturus-Israel ordinary shares by a person who (i) holds the ordinary shares as a capital asset, (ii) qualifies as a resident of the United States within the meaning of the Treaty, and (iii) is entitled to claim the benefits afforded to such resident by the Treaty (such person being referred to herein as a "Treaty US Resident") should generally be exempt from Israeli capital gain tax. Such exemption will not apply if (i) such Treaty US Resident is an individual who was present in Israel for a period or periods aggregating 183 days or more during the relevant taxable year; (ii) such Treaty US Resident held, directly or indirectly, shares representing 10% or more of the voting rights of a company during any part of the 12-month period preceding such sale, exchange, or disposition, subject to certain conditions; (iii) the gain arising from such sale, exchange, or disposition can be attributable to a permanent establishment of the shareholder maintained in Israel, subject to certain conditions; (iv) the capital gains arising from such sale, exchange, or disposition are attributed to real estate located in Israel; or (v) the capital gains arising from such sale, exchange, or disposition are attributed to royalties. In each case, the sale, exchange, or disposition of Arcturus-Israel ordinary shares would be subject to Israeli tax, to the extent applicable. However, under the Treaty, such Treaty US Resident would be permitted to claim a credit for such taxes against the US federal income tax imposed with respect to such sale, exchange, or disposition, under the circumstances and subject to the limitations of the Treaty or the US laws applicable to foreign tax credits.

The Tax Ruling

In connection with the Exchange Agreement and the Arcturus Redomiciliation Proposal, Arcturus-Israel has filed, on behalf of its shareholders, an application for a Tax Ruling with the Israel Tax Authority, applicable for shareholders not otherwise exempt from Israeli tax on the Transaction, to treat the Transaction as a tax-deferred transaction for the purposes of Israeli tax laws, in accordance with Section 104H of the Israeli Tax Ordinance.

The Tax Ruling application details the proposed restructure in several steps to be executed simultaneously, as follows:

1. Arcturus-Delaware will be incorporated as a US-resident entity.
2. Arcturus-Israel's shareholders will transfer their holding in Arcturus-Israel to Arcturus-Delaware in exchange for shares issued in Arcturus-Delaware, which will eventually become a listed company.
    a. The non-Israeli resident shareholders will transfer their shares in a tax exempt event in accordance with Section 97(b3) of the Israeli Tax Ordinance.
    b. The Israeli resident shareholders will transfer their shares as a tax-deferred transaction in accordance with Section 104H of the Israeli Tax Ordinance.
3. Arcturus-Israel will distribute Private Arcturus shares as a dividend in kind to Arcturus-Delaware, in a taxable event.

The Tax Ruling application requests to approve that the exchange of Arcturus-Israel ordinary shares by Israeli resident shareholders for shares issued in Arcturus-Delaware (as detailed in subsection 2(b) above) shall not be treated as a "sale" pursuant to Section E of the Israeli Tax Ordinance on the date of the share exchange,

but rather will be considered a tax-deferred transaction until the actual sale of the shares issued in Arcturus-Delaware, all in accordance with the provisions and terms to be determined within the Tax Ruling. (Additional exemptions were also requested in the Tax Ruling application regarding certain provision of Section 104H.)

Nevertheless, the Tax Ruling application does not request to rule either in regard to the tax exemption for non-Israeli resident shareholders under Section 97(b3) of the Israeli Tax Ordinance (as detailed in subsection 2(a) above), or in regard to the Private Arcturus shares' distribution as a dividend in kind to Arcturus-Delaware (as detailed in subsection 3 above). Therefore, the Tax Ruling will not make a ruling on such matters. However, it should be emphasized that regardless of the Tax Ruling, the Private Arcturus shares' distribution as a dividend in kind to Arcturus-Delaware will be executed as a taxable event and may have withholding tax implications on Arcturus-Israel (as a distributer).

NOTE THAT THERE IS NO ASSURANCE THAT SUCH TAX RULING WILL BE OBTAINED FROM THE ISRAEL TAX AUTHORITY PRIOR TO THE CONSUMMATION OF THE TRANSACTION, NOR THAT, IF IT IS OBTAINED, IT WILL PROVIDE THE FOREGOING. IF SUCH TAX RULING IS NOT OBTAINED PRIOR TO SUCH TIME, AND STILL THE RESTRUCTURE SHALL OCCUR, TAX SHALL BE WITHHELD FROM THE CONSIDERATION PAYABLE FOR EACH ARCTURUS-ISRAEL ORDINARY SHARE AT A RATE OF TWENTY FIVE (25) PERCENT OR IN ACCORDANCE WITH OTHER INSTRUCTIONS PROVIDED BY THE ISRAEL TAX AUTHORITY. IF SUCH TAX RULING PROVIDES OTHER INSTRUCTIONS THAN THOSE DESCRIBED ABOVE, ARCTURUS-DELAWARE SHALL COMPLY WITH SUCH TAX RULING.

DESCRIPTION OF ARCTURUS-DELAWARE CAPITAL STOCK

The following description of Arcturus-Delaware's capital stock is a summary. This summary is subject to the General Corporation Law of the State of Delaware (the "**DGCL**") and the complete text of Arcturus-Delaware's certificate of incorporation and bylaws to be in place at the closing of the Transaction which will be substantially in the forms attached as Annex C and Annex D, respectively, to this proxy statement/prospectus. We encourage you to read that law and those documents carefully.

There are differences between Arcturus-Israel's constitution and Arcturus-Delaware's certificate of incorporation and bylaws as they are expected to be in effect after the Transaction, especially relating to changes (i) that are required by Delaware law (i.e., certain provisions of the Arcturus-Israel constitution were not replicated in the Arcturus-Delaware certificate of incorporation or bylaws because the DGCL would not permit such replication, and certain provisions were included in the Arcturus-Delaware certificate of incorporation and bylaws although they were not in the Arcturus-Israel constitution because the DGCL requires such provisions to be included in the certificate of incorporation and bylaws of a Delaware corporation or to provide for related provisions customarily provided in respect of publicly-traded Delaware corporations), or (ii) that are necessary in order to preserve the current rights of shareholders and powers of the board of directors of Arcturus following the Transaction. See "Comparison of Rights of Israel Shareholders and Delaware Stockholders."

General

The Arcturus-Delaware certificate of incorporation will authorize thirty million (30,000,000) shares of common stock, $0.001 par value per share, and ten million (10,000,000) shares of preferred stock, $0.001 par value per share.

Common Stock

Voting Rights

Each holder of Arcturus-Delaware common stock will be entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Arcturus-Delaware stockholders will not have cumulative voting rights in the election of directors. Accordingly, in an uncontested election, holders of a majority of the voting shares will be able to elect all of the directors.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of Arcturus-Delaware common stock will be entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. Dividends may be paid in cash, in property or in shares of common stock. Declaration and payment of any dividend will be subject to the discretion of the Arcturus-Delaware board of directors. The time and amount of dividends will be dependent upon our financial condition, operations, cash requirements and availability, debt repayment obligations, capital expenditure needs, restrictions in our debt instruments, industry trends, the provisions of Delaware law affecting the payment of distributions to stockholders and any other factors the Arcturus-Delaware board of directors may consider relevant.

Liquidation

In the event of Arcturus-Delaware's liquidation, dissolution or winding up, holders of Arcturus-Delaware common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of Arcturus-Delaware's debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Rights and Preferences

Holders of Arcturus-Delaware common stock will have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of Arcturus-Delaware common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of Arcturus-Delaware preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All outstanding shares of common stock of Arcturus-Delaware are, and the shares of common stock to be issued upon the completion of this Transaction will be, fully paid and non-assessable.

Preferred Stock

The Arcturus-Delaware certificate of incorporation will authorize the board of directors of Arcturus-Delaware to issue preferred stock in one or more series and to determine the preferences, limitations and relative rights of any shares of preferred stock that it shall choose to issue, without vote or action by the stockholders.

Annual Stockholder Meetings

The Arcturus-Delaware certificate of incorporation and bylaws will provide that annual stockholder meetings will be held at a date, place (if any) and time, as exclusively selected by the Arcturus-Delaware board of directors. To the extent permitted under applicable law, we may but are not obligated to conduct meetings by remote communications, including by webcast.

Anti-Takeover Effects of Provisions of the Arcturus-Delaware Certificate of Incorporation and Bylaws and Delaware Law

Some provisions of Delaware law and the Arcturus-Delaware certificate of incorporation and bylaws could make the following transactions difficult: acquisition of Arcturus-Delaware by means of a tender offer; acquisition of Arcturus-Delaware by means of a proxy contest or otherwise; or removal of incumbent officers and directors of Arcturus-Delaware. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in the best interests of Arcturus-Delaware, including transactions that might result in a premium over the market price for Arcturus-Delaware shares. These provisions will replace and substitute applicable provisions of Israel law and we cannot predict whether they will make an acquisition more or less likely compared to those provisions.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of Arcturus-Delaware to first negotiate with the company's board of directors. We believe that the benefits of protection to Arcturus-Delaware's potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure Arcturus-Delaware outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Statute

Arcturus-Delaware will be subject to Section 203 of the DGCL, which prohibits persons deemed "interested stockholders" from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or

another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock and a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock will make it possible for the Arcturus-Delaware board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of Arcturus-Delaware. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Special Stockholder Meetings

The Arcturus-Delaware certificate of incorporation provides that a may be called by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in officer, the Chief Executive Officer (or if there is no Chief Executive Officer, the President) or the Chairman of the Board of Directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

The bylaws of Arcturus-Delaware will establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

No Stockholder Action by Written Consent

The Arcturus-Delaware certificate of incorporation and bylaws will not provide for the right of stockholders to act by written consent without a meeting.

Composition of the Board of Directors; Election and Removal of Directors; Filling Vacancies

The Arcturus-Delaware board of directors will consist of not less than one nor more than 9 directors. Directors will be elected by the affirmative vote of a majority of the votes cast with respect to such director by the shares represented and entitled to vote at a meeting of the stockholders for the election of directors at which a quorum is present, voting together as a single class. The Nominating and Corporate Governance Committee of the board of directors (or any future committee the equivalent thereof) will make a recommendation to the board of directors on whether to accept or reject the resignation, or whether other action should be taken. The board of directors will act on the recommendation of such committee and will publicly disclose its decision within 90 days from the date of the certification of the election results. The directors of Arcturus-Delaware are elected until the expiration of the term for which they are elected and until their respective successors are duly elected and qualified.

The directors of Arcturus-Delaware may be removed only by the affirmative vote of at least a majority of the holders of our then-outstanding common stock. Furthermore, any vacancy on the Arcturus-Delaware board of directors, however occurring, including a vacancy resulting from an increase in the size of the board, may be filled only by a majority vote of the board of directors then in office, even if less than a quorum, or by the sole remaining director. This system of electing and removing directors and filling vacancies may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of Arcturus-Delaware, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Choice of Forum

The Arcturus-Delaware bylaws will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, the Arcturus-Delaware certificate of incorporation or bylaws; or any action asserting a claim against Arcturus-Delaware that is governed by the internal affairs doctrine. Although the Arcturus-Delaware certificate of incorporation will contain the choice of forum provision described above, it is possible that a court could find that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

Amendment of the Certificate of Incorporation and Bylaws

The amendment of any of the provisions in the certificate of incorporation would require approval by a stockholder vote by the holders of at least a majority of the voting power of the then outstanding voting stock, except for Articles VI (relating to Amendments to the certificate of incorporation (specifically the Section relating to this provision for an amendment and not the entire Certificate of Incorporation generally) and amendments to the bylaws) and Article VII relating Stockholder Actions for which holders of at least 66 2/3% of the voting power of the outstanding stock is required. The bylaws of Arcturus-Delaware may be amended by the board of directors or by the holders of at least 66 2/3% of the voting power of the then outstanding voting stock.

The provisions of the DGCL, the Arcturus-Delaware certificate of incorporation and bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of Arcturus-Delaware common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the management of Arcturus-Delaware. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Limitations of Liability and Indemnification Matters

The Arcturus-Delaware certificate of incorporation will contain provisions that limit the liability of the directors and officers of Arcturus-Delaware for monetary damages to the fullest extent permitted by Delaware law. Consequently, Arcturus-Delaware directors and officers will not be personally liable to the company or its stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director’s or officer’s duty of loyalty to the company or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or
- any transaction from which the director or officer derived an improper personal benefit.

Each of the Arcturus-Delaware certificate of incorporation and bylaws will provide that we are required to indemnify the directors and officers of Arcturus-Delaware, in each case to the fullest extent permitted by Delaware law. The Arcturus-Delaware bylaws will permit us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered into agreements with the Arcturus-Israel directors, officers and other employees and expect to enter into agreements to indemnify the Arcturus-Delaware directors, executive officers and other employees as determined by the Arcturus-Delaware board of directors. With specified exceptions, these agreements provide for

indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding to the fullest extent permitted by applicable law. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. Arcturus-Delaware also maintains directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in the Arcturus-Delaware certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against Arcturus-Delaware directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against Arcturus-Delaware directors and officers, even though an action, if successful, might benefit the company and its stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage.

Stock Exchange Listing

We will submit a notification form with NASDAQ and expect that, upon the consummation of the Transaction, the Arcturus-Delaware shares of common stock will be listed on NASDAQ under the symbol "ARCT," the same symbol under which your Arcturus-Israel ordinary shares are currently listed.

No Sinking Fund

The Arcturus-Delaware shares of common stock have no sinking fund provisions.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be Continental Stock Transfer and Trust 1 State Street, 30th Floor, New York, NY 10004-1561.

COMPARISON OF RIGHTS OF ISRAEL SHAREHOLDERS AND DELAWARE STOCKHOLDERS

Your rights as an ordinary shareholder of Arcturus-Israel and the powers of Arcturus-Israel's board of directors are governed by Israel law and Arcturus-Israel's constitution. As a result of the Transaction, you will become a stockholder of Arcturus-Delaware, and your rights and the powers of Arcturus-Delaware's board of directors will be governed by Delaware law and Arcturus-Delaware's certificate of incorporation and bylaws as they will be in effect upon the completion of the Transaction.

Many of the principal attributes of Arcturus-Israel's ordinary shares and Arcturus-Delaware's shares of common stock will be similar. However, there are differences between what your rights are under Israel law and what they will be after the Transaction under Delaware law. In addition, there are differences between Arcturus-Israel's articles of association and Arcturus-Delaware's certificate of incorporation and bylaws as they will be in effect after the Transaction, especially as it relates to changes (i) that are required by Israel law (i.e., certain provisions of the Arcturus-Israel's articles of association were not replicated in the Arcturus-Delaware certificate of incorporation and bylaws because Delaware law would not permit such replication, and certain provisions were included in the Arcturus-Delaware certificate of incorporation and bylaws although they were not in the Arcturus-Israel articles of association because Delaware law requires such provisions to be included in the certificate of incorporation and bylaws of a Delaware corporation or to provide for provisions customarily provided in respect of publicly-traded Delaware corporations), or (ii) that are necessary in order to preserve the current rights of shareholders and powers of the board of directors of Arcturus-Israel following the Transaction.

The following discussion is a summary of material changes in your rights resulting from the Transaction. This summary does not cover all of the differences between Israel law and Delaware law affecting companies and their shareholders or all the differences between Arcturus-Israel's constitution and Arcturus-Delaware's certificate of incorporation and bylaws. This summary is subject to the complete text of the relevant provisions of the Israeli Companies Law (the "**ICL**"), the DGCL, Arcturus-Israel's constitution and Arcturus-Delaware's certificate of incorporation and bylaws as they will be in effect after the Transaction. We encourage you to read those laws and documents carefully.

The form of Arcturus-Delaware's certificate of incorporation and bylaws substantially as they will be in effect after the Transaction are attached as Annex C and Annex D, respectively, to this proxy statement/prospectus. For information as to how you can obtain Arcturus-Israel's constitution, please see "Where You Can Find More Information." Except where otherwise indicated, the discussion of Arcturus-Delaware below reflects Arcturus-Delaware's certificate of incorporation and bylaws as those documents will be in effect upon completion of the Transaction.

Summary of Material Differences Between the Rights of Arcturus-Delaware Stockholders and Arcturus-Israel Shareholders

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
Authorized Capital Stock	Under the Arcturus-Delaware Certificate of Incorporation, Arcturus-Delaware will be authorized to issue up to 40,000,000 shares, consisting of the following: (i) 30,000,000 shares of common stock, par value $0.001 per share; and (ii) 10,000,000 shares of undesignated preferred stock, par value $0.001 per share.	The authorized share capital of Arcturus-Israel is NIS 2,100,000, divided into 30,000,000 ordinary shares, par value $0.07 per shares. According to Arcturus-Israel's Articles it may, from time to time, via a shareholders' resolution approved by a majority of the participating votes cast by holders of shares present or represented by proxy: (i) increase its authorized share capital by creating new

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	Arcturus-Delaware's board of directors is authorized to issue preferred stock in one or more series and to fix the voting powers, designations, preferences and relative participating, optional or other rights, and the qualifications, limitations or restrictions of each series, and to establish the number of shares of any such series.	shares of an existing or new class, as shall be determined in the resolution of the general meeting; (ii) cancel registered share capital that has not yet been allocated, on condition that there are no undertakings of the company, including conditional undertakings, to allocate the shares; and (iii) subject to applicable law, reduce its share capital by cancelling such shares and registering the par value paid for such shares as paid premiums remaining in the issued share capital.
Voting Rights	Each share of common stock outstanding shall be entitled to one vote on all matters on which shareholders generally are entitled to vote. Holders of preferred stock, if any, shall be entitled only to such voting rights as are expressly granted in the Arcturus-Delaware Certificate of Incorporation, as in effect from time to time, or in the certificate of designation of the preferred stock approved by the board of directors, if and when issued.	According to the Arcturus-Israel's Articles, Every shareholder has one vote for each ordinary share held of record, on every shareholder resolution (subject to any provisions under the Arcturus-Israel Articles or the Israeli Companies Law conferring special rights as to voting). Any shareholder entitled to vote may vote either in person or by proxy, or if the shareholder is a company or other corporate body, by representative duly authorized by it. Except as required by the Israeli Companies Law or the Arcturus-Israel Articles, a resolution of the shareholders is adopted if approved by the holders of a simple majority of the voting power represented at a shareholder meeting in person or by proxy and voting thereon, as one class, and disregarding abstentions from the count of the voting power present and voting.
Number of Directors	Under the Arcturus-Delaware Certificate of Incorporation, the number of directors shall be at least one and no more than nine, as fixed by the board of directors from time to time. The current	Under the Arcturus-Israel Articles, the number of directors shall be between five and eleven (including at least two statutory external directors, the number of which shall not be less than that

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	Arcturus-Delaware board of directors consists of one director.	required by the Companies Law). The current Arcturus-Israel board of directors consists of five directors, without external directors, following Arcturus-Israel adoption of a relief prescribed under regulation 5(b) of the Companies Regulations (Relief for Companies with Securities Listed on a Stock Exchange Outside Israel), 5760-2000 (the "**Relief Regulations**").
Director Independence	The DGCL does not impose any specific requirement regarding the independence of directors.	Under the Israeli Companies Law, a public company must have at least two statutory external directors. In order to qualify as an external director, the individual must meet certain independence criteria, including not having "affiliation" (defined to include, among other things, employment relationship) with (i) the controlling shareholder of the company or (ii) in a company without a controlling shareholder (or a shareholder that owns more than 25% of its voting power), with any person who, at the time of appointment, is the chairman, the chief executive officer, the chief financial officer or a 5% shareholder of the company. As aforesaid, as of today, the Company has no external directors.
Election of Directors; Term	Directors are elected, until the next annual general meeting of shareholders or earlier resignation or removal, at an annual meeting of stockholders at which a quorum is present by a plurality vote.	Under the Arcturus-Israel articles, directors (Except for external directors) are elected, until the next annual general meeting of shareholders or earlier resignation or removal, at an annual or extraordinary general meeting of shareholders by a majority of the participating votes cast by holders of shares present or represented by proxy.

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
		According to the Companies Law, the external directors are elected by a qualified majority at a general meeting of shareholders. The votes cast in favor of the election of the external directors must include at least a majority of the votes cast by non-controlling shareholders (not including abstentions), or, in the alternative, the votes cast against the election of the external directors by non-controlling shareholders may not exceed 2% of the company's total voting power. Pursuant to the Israeli Companies Law, the external directors serve for a term of three years each, which may be extended for two additional terms of three years each under certain circumstances. The Relief Regulations enable longer periods of term, subject to certain circumstances and approvals.
Removal of Directors	The Arcturus-Delaware Bylaws provide that any director may be removed, with or without cause, by the holders of a majority of shares then entitled to vote on the election of directors.	According to Arcturus-Israel's Articles, Directors, other than the external directors, may be removed from office only upon: (a) resignation of the Director; (b) the occurrence of one of certain events set forth in the Israeli Companies Law; or (c) the vote of the annual or extraordinary general meeting of shareholders. External directors may only be removed in accordance with the relevant provisions of the Israeli Companies Law.
Vacancies on the Board	The Arcturus-Delaware Bylaws provide that vacancies on the board of directors may be filled by the affirmative vote of a majority of the remaining directors, though less than a quorum, by a sole remaining director or by the stockholders. Directors so chosen shall hold office for a term expiring at the annual meeting of stockholders at which the term of	According to the Arcturus-Israel's articles of association, the Board of Directors may appoint a director instead of a director (who is not an external director) whose office has been vacated or to appoint new additions to the Board up to the maximum number of directors as aforesaid. The appointment of a director by the board of directors shall be valid

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	office of the class to which they have been elected expires and until the director's successor shall have been duly elected and qualified.	until the next annual meeting or until the director ceases to hold office According to the provisions of the Arcturus-Israel's Articles or any law, whichever is earlier. If any vacancies less than the minimum number of directors occur on the board of directors, the remaining directors then in office may generally continue to act only for filling the required position of director and in order to call a general meeting of shareholders for the election of a new board of directors, and until such general meeting, only in order to act in regards to any unpostponable matters.
Board Quorum and Vote Requirements	The Arcturus-Delaware Bylaws provide that at any meeting of Arcturus-Delaware's board of directors, the presence of a majority of the number of directors constitutes a quorum for the transaction of business. Except as otherwise required by Delaware law or the Arcturus-Delaware Bylaws, the vote of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors. If Arcturus-Delaware board of directors shall have an even number of directors in office, all of whom attend at the meeting, who are equally divided, the Chairman of the Board shall have the deciding vote.	The quorum required for a meeting of the board of directors is the presence of a majority of the directors then serving in office. If such majority is not present at the end of half an hour called for a session, then the session will be postponed in accordance with the Arcturus-Israel Articles and at the postponed meeting, the presence of two directors will serve as a quorum. Except as otherwise required by the Israeli Companies Law or the Arcturus-Israel Articles, a resolution is adopted if approved by a simple majority of the directors present and voting at any meeting at which a quorum is present. The Chairman of the Board shall not have an additional vote.
Committees of the Board of Directors	The Arcturus-Delaware Bylaws provide that Arcturus-Delaware's board of directors may designate standing and special committees of the board and shall, for those committees and any others, elect a director or directors to serve as the member or members, designating, if it desires, other directors as	Under the Israeli Companies Law, the board of directors of a public company must appoint an audit committee and a compensation committee. The number of members of such committees shall not be fewer than three, and all external directors must be members thereof.

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	alternate members who may replace any absent or disqualified member at any meeting of the committee.	The duties of the audit committee include, among others, identifying any defects in the business management of the company and deciding whether to approve acts and transactions that require the approval of the audit committee under the Israeli Companies Law, such as certain affiliated party transactions. The duties of the compensation committee include: (a) to recommend to the board of directors the compensation policy for office holders and once every three years regarding the re-approval of the compensation policy whenever such policy is set for a period exceeding three years; (b) to recommend to the board of directors that it update the compensation policy from time to time and examine its implementation; (c) to decide whether to approve transactions with respect to the terms of office and employment of office holders requiring the approval of the compensation committee, as specified in the Companies Law; (d) to exempt a transaction from the approval of the general meeting, as specified in the Israeli Companies Law.
Concurrent Office of Chairman and CEO	The DGCL does not restrict the concurrent holding of the office of chairman of the board of directors and chief executive officer.	The concurrent office of chairman of the board of directors and a chief executive officer requires approval by a special majority of the shareholders, for periods of up to three years each.
Limitation of Personal Liability of Directors and Officers	The DGCL allows a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except where the director breached the duty of loyalty, failed to act in good faith,	An Israeli company may exculpate an office holder in advance from liability to the company, in whole or in part, for damages caused to the company as a result of a breach of duty of care (other than liability arising out of a prohibited dividend or distribution to shareholders) but only if a provision authorizing such

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Arcturus-Delaware's Amended Certificate of Incorporation provides for this limitation of liability.	exculpation is included in its articles of association. Arcturus-Israel's Articles include such a provision.
Indemnification and Insurance of Directors, Officers and Employees	The DGCL allows a corporation to indemnify any person who is or was a director, officer, employee, or agent of the corporation, or serving at the request of the corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust or other enterprise, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The Arcturus-Delaware Bylaws provides for this indemnification to the fullest extent authorized by the DGCL. In addition, the right to indemnification under the Arcturus-Delaware Bylaws includes the right to be paid by Arcturus-Delaware the expenses incurred in defending or otherwise participating in any proceeding in advance of its final disposition. The Arcturus-Delaware Bylaws also provide that Arcturus-Delaware may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or	As permitted under the Israeli Companies Law and the Israeli Securities Law, 5728-1968, Arcturus-Israel Articles provide that Arcturus-Israel is entitled to indemnify Its office holders for any obligation or expense imposed on him or her in consequence of any action which was performed by the office holder in his or her capacity as an office holder, in respect to any of the following: (a) a monetary obligation imposed on the office holder in favor of another person pursuant to a judgment, including a judgment given in settlement, or a court approved settlement or arbitrator's award; (b) reasonable legal fees, incurred by an office holder or which he is ordered to pay by a court, in proceedings filed against him or her by Arcturus-Israel or on its behalf or by another person, or in a criminal charge of which he or she is acquitted, or in a criminal charge of which he or she is convicted of an offense that does not require proof of criminal intent; (c) reasonable litigation expenses, including legal fees, incurred by an office holder as a consequence of an investigation or proceedings carried out against the office holder by an authorized body and which concluded without the filing of an indictment against the office holder and without imposing any financial

Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
loss, whether or not the corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.	liability on the office holder as an alternative to criminal proceedings, or which ended without the filing of an indictment against the office holder but with the imposition of financial liability as an alternative to criminal proceedings, in an offense where criminal intent is not required; (d) expenses in connection with proceedings under clause (b) above; (e) payments made to injured persons in connection with administrative proceedings that may be instituted against him or her under Israeli securities laws; and (f) any other liability or expense that is permissible to be indemnified under applicable law. However, Arcturus-Israel may undertake in advance to indemnify any officer holder for obligations and expenses as set out above, except that with respect to clause (a) above, only provided that such undertaking is limited to events which in the board of directors' opinion are foreseeable at the time of providing the indemnity undertaking in view of Arcturus-Israel' activities at that time, and in such amount and/or criteria as the board of directors deems reasonable in view of the Arcturus-Israel' activities at that time and such events, sums and criteria shall be detailed in the undertaking instrument. Arcturus-Israel may also purchase insurance to cover the liability of any office holder as a result of any of the following: (a) a breach of the duty of care to Arcturus-Israel or to another person; (b) a breach of the duty of loyalty to Arcturus-Israel, provided that the office holder acted in good faith and had a reasonable basis to believe that the act would not adversely affect the best interests of Arcturus-

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
		Israel; (c) a monetary obligation imposed on him or her in favor of another person in respect of an act done in his or her capacity as an office holder; and (d) any other action that is permissible to be insured under applicable law. The Arcturus-Israel Articles and the Israeli Companies Law provide that these indemnification and insurance provisions do not apply in the following cases: (a) breach of the duty of loyalty to Arcturus-Israel, unless the office holder acted in good faith and had a reasonable basis for presuming that the act would be in the best interests of Arcturus-Israel; (b) a breach of duty of care committed intentionally or recklessly, excluding a breach arising out of the negligent conduct of the office holder, (c) an act or omission committed with intent to derive illegal personal benefit; or (d) a fine levied against the office holder.
Conflict of Interest; Interested Party Transactions	Under the DGCL, no contract or transaction between Arcturus-Delaware and one or more of its directors or officers, or between Arcturus-Delaware and any other corporation, partnership, association, or other organization in which one or more of its directors or officers are directors or officers or have a financial interest, shall be void or voidable solely because of such relationship or interest, or solely because the director or officer is present at or participates in the meeting of the board of directors or committee of the board of directors that authorizes the contract or transaction or solely because the director's or officer's vote was counted for such purpose, if: • the material facts as to the director's or officer's	The Israeli Companies Law requires that an office holder promptly disclose any "personal interest" that he or she may have and all related material information known to him or her, in connection with any existing or proposed transaction of the company. In the case of a transaction with an office holder or with another person in which an office holder has a "personal interest" which is not an extraordinary transaction, subject to the office holder's disclosure of his or her interest, board approval is sufficient for the approval of the transaction. The transaction must not be adverse to the company's interest. If the transaction is an extraordinary transaction (a transaction not in the ordinary course, which is not

Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
relationship or interest and as to the contract or transaction are disclosed or are known to the board of directors or the committee, and the board of directors or committee in good faith authorizes the contract or transaction by the affirmative vote of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; • the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by the vote of the stockholders; or • the contract or transaction is fair to Arcturus-Delaware as of the time it is authorized, approved, or ratified by the board of directors, a committee of the board of directors, or the stockholders. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the board of directors or of a committee thereof which authorizes the contract or the transaction.	on market terms, or that is likely to have a material impact on the company's profitability, properties or obligations), it must be approved by the audit committee and the board of directors. Generally, an office holder who has a personal interest in a matter that is considered at a meeting of the board of directors or the audit committee may not be present at the meeting or vote thereon. Under the Israeli Companies Law, the disclosure requirements that apply to an office holder also apply to a controlling shareholder of a public company. In addition, extraordinary transactions with a controlling shareholder or in which a controlling shareholder has a personal interest, and the engagement of a controlling shareholder as an office holder or employee (including compensation therefor), generally require the approval of the audit committee (or compensation committee with respect to engagement as an office holder or employee), the board of directors and the shareholders, in that order. The shareholder approval must include at least a majority of the shares of non-interested shareholders voted on the matter. However, the transaction can be approved by shareholders without this special approval if the total shares of non-interested shareholders that voted against the transaction do not represent more than 2% of the voting rights in the company. In addition, any such extraordinary transaction whose term is longer than three years may require further shareholder approval every three years, unless, where permissible under the Israeli Companies Law, the audit committee approves that a longer

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
		term is reasonable under the circumstances. In addition, under the Israeli Companies Law, each shareholder has a duty to act in good faith toward the company and other shareholders and to refrain from abusing his or her power in the company, such as in shareholder votes. In addition, specified shareholders have a duty of fairness toward the company. These shareholders include any controlling shareholder, any shareholder who knows that it possesses the power to determine the outcome of a shareholder vote and any shareholder who, pursuant to the provisions of the articles of association, has the power to appoint or prevent the appointment of an office holder or any other power with respect to the company.
Executive Compensation	In according with the Arcturus-Delaware Bylaws, the board of directors of the company will determine the employment terms of the directors. Under the DGCL, the Board of Directors determines the employment terms of the CEO. For details regarding compensation of controlling shareholders, see above under “Conflict of Interest; Interested Party Transactions”.	Under the Israeli Companies Law, a public company is obligated to determine a compensation policy regarding the terms of office and employment of officers in the Company. The compensation policy must be approved (subject to a number of exceptions) by the compensation committee, the board of directors and the general meeting of the shareholders by a special majority. The terms of office of officer holders shall be in accordance with the compensation policy (subject to certain exceptions). The compensation terms of directors, the chief executive officer, and any employee or service provider who is considered a controlling shareholder must, subject to certain exceptions, be approved separately by the compensation committee, the board of directors and the by a

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
		special majority of the shareholders, in that order. The compensation terms of other executive officers require the approval of the compensation committee and the board of directors.
Annual Stockholders Meeting	The Arcturus-Delaware Bylaws provide that annual meetings are held at such date and time as is designated by the board of directors, which date shall be within thirteen months of the last annual meeting of stockholders.	The annual general meeting of Arcturus-Israel shareholders is to be held at such date and time as determined by the board of directors, but no later than fifteen months after the last annual meeting.
Notice and Delivery Requirements for Stockholder Nominations and Proposals	Arcturus-Delaware's Bylaws provide that in order for a stockholder to make any director nomination or propose business at Arcturus-Delaware's annual meeting, the stockholder must own more than 5% of the outstanding common stock of the Arcturus-Delaware and must provide timely notice in writing to Arcturus-Delaware's Secretary, which must be received not fewer than 45 and not more than 75 days in advance of the date that is the one year anniversary of the date on which Arcturus-Delaware first mailed its proxy materials for preceding year's annual stockholders meeting (with certain adjustments if the annual meeting is changed by more than 30 days from the first anniversary of the preceding year's annual meeting or if no annual meeting was held in the preceding year). Arcturus-Delaware's Bylaws also provide that if a shareholder proposes to appoint a director at a special meeting, the shareholder must provide written notice to the secretary of the designated company no later than 90 days prior to the convening of the special meeting or 10 days after	According to the Company law, One or more shareholders holding at least one percent of the voting rights at the general meeting may request that the board of directors include a matter in the agenda of a general meeting (provided that it is appropriate to discuss such item in the meeting).

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	the date of convening this meeting is reported to the public.	
Ability to Call Special Meetings of Stockholders	The Arcturus-Delaware Certificate of Incorporation provides that special meetings of the Arcturus-Delaware stockholders may be called by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office, the Chief Executive Officer (or if there is no Chief Executive Officer, the President) or the Chairman of the Board of Directors.	Under the Israeli Companies Law and the Arcturus-Israel Articles, extraordinary general meetings of the company's shareholders may be called by the board of directors at any time and shall be called at the request of (a) two directors; (b) one-quarter of the directors in office; (c) shareholder(s) holding at least 5% of the outstanding ordinary shares of the combined company and at least 1% of the combined company's voting rights; or (d) shareholder(s) holding at least 5% of the combined company's voting rights.
Notice of Stockholder Meeting	Under the Arcturus-Delaware Bylaws, a written notice of the annual meeting or any special meeting stating the place, date and hour of the meeting (and, in the case of a special meeting, the purpose or purposes for which the meeting is called) must be given to each stockholder entitled to vote at the meeting not less than 10 and not more than 60 days before the date of the meeting.	Pursuant to the Companies Regulations (Notice of General Meeting and Class Meeting in a Public Company), 5760—2000, notice of the general meetings of shareholders, stating the agenda and proposed resolutions must be delivered to shareholders of record and published at least 21 days prior to the meeting. In the event that the agenda for the meeting includes certain proposed resolutions (for example, the appointment or dismissal of directors, the approval of a merger or transactions with a controlling shareholder), notice of the meeting must be delivered and published at least 35 days prior to the meeting. Action may only be taken concerning any agenda item included in the notice provided to shareholders.
Stockholder/ Shareholder Quorum Requirements	The Arcturus-Delaware Bylaws provide that the holders of at least 33.33% of the total votes entitled to be cast by the holders of all outstanding capital stock, present in person or by proxy, constitute a quorum for all purposes, unless or	The presence in person or by proxy of two or more shareholders who jointly hold at least one third of Arcturus-Israel' voting rights at a general shareholders' meeting constitutes a quorum for the transaction of business at such

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	except to the extent that the presence of a larger number is required by law. If a quorum shall fail to attend any meeting, the chair of the meeting may adjourn the meeting to another place, if any, date and time.	meeting. If no quorum is present within half an hour after the time set for the meeting, whether an annual or extraordinary general meeting, the meeting shall be adjourned and, at such adjourned meeting, the presence of any two shareholders constitutes a quorum.
Action of Stockholders by Written Consent	The Arcturus-Delaware Certificate of Incorporation prohibits stockholder action by written consent.	The Israeli Companies Law does not provide for action of shareholders of a public company by written consent in lieu of a meeting.
Amendment of Certificate of Incorporation, Bylaws, Articles of Association	Under the DGCL, a proposed amendment to a corporation's certificate of incorporation requires approval by its board of directors and adoption by an affirmative majority of the outstanding stock entitled to vote on the amendment, except for Articles VI and VIII of the Arcturus-Delaware Certificate of Incorporation relating to amendments to the certificate of incorporation (specifically the Section relating to this provision for an amendment and not the entire certificate of incorporation generally) and amendments to the bylaws and Article VII relating Stockholder Actions for which a vote of the holders of at least 66 2/3% of the voting power of the then outstanding voting stock is required. In addition to the foregoing requirement, the Arcturus-Delaware Certificate of Incorporation provides that any amendment related to limitation of liability and indemnity of directors and officers requires the affirmative vote of the holders of at least 66 2/3% of the capital stock entitled to vote. The Arcturus-Delaware Certificate of Incorporation provides that the board of directors is expressly authorized to make, alter, amend,	Under the Israeli Companies Law, the articles of association set forth substantially all of the provisions that under Delaware law are split between the certificate of incorporation and the bylaws of a company. In this respect, Arcturus-Israel Articles provide that, unless determined otherwise under the terms of an offering and subject to applicable law, the rights attached to any type of shares may be modified by a resolution of the Board of Directors, following the approval of a majority of the shareholders of such type of shares attending the general meeting.

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	or repeal the Arcturus-Delaware Bylaws subject to the power of the stockholders to alter, amend or repeal the bylaws, the affirmative vote of the holders of at least 66⅔% of the capital stock of the corporation entitled to vote being required.	
Distributions and Dividends	Under the DGCL, dividends may be declared by a board of directors, subject to any restrictions in a corporation's certificate of incorporation, and paid out of the corporation's surplus or, if no surplus is available, out of any net profits for the fiscal year in which the dividend is declared and for the preceding fiscal year, or both, provided that such payment out of net profits would not reduce capital below the amount of capital represented by all classes of outstanding stock having a preference as to the distribution of assets upon liquidation of a corporation.	According to the Israeli Companies Law, a company may make distributions (including dividends and share repurchase) only out of its "profits," as such term is defined in the Israeli Companies Law, as of the end of the most recent fiscal year or as accrued over a period of two years, whichever is higher. The board of directors of Arcturus-Israel is authorized to declare dividends, provided that there is no reasonable concern that payment of the dividend will prevent Arcturus-Israel from satisfying its existing and foreseeable obligations as they become due. Notwithstanding the foregoing, dividends may be paid with the approval of a court, provided that there is no reasonable concern that payment of the dividend will prevent Arcturus-Israel from satisfying its existing and foreseeable obligations as they become due. Profits, for purposes of the Israeli Companies Law, means the greater of retained earnings or earnings accumulated during the preceding two years, after deduction of previous distributions that were not already deducted from the surpluses, as evidenced by financial statements prepared no more than six months prior to the date of distribution.
Stockholder Rights Plan	Arcturus-Delaware currently has no shareholder rights plan in effect.	Arcturus-Israel does not have a shareholder rights plan.

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
Interested Shareholder Transactions; Anti-Takeover Effects	In general, section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested" stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination or the transaction by which the person became an interested stockholder is approved in a prescribed manner. A "business combination" includes certain mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to exceptions, an "interested" stockholder is a person who, alone or together with his affiliates and associates, owns 15 percent or more of the corporation's voting stock. The Arcturus-Delaware Certificate of Incorporation does not opt out of this provision.	Under the Israeli Companies Law, the acquisition of shares in a public company whereby the acquiring person would obtain a controlling interest (an interest of 25% or more) is not permitted if the company does not already have a shareholder that has a controlling interest, and an acquisition whereby the acquiring shareholder would thereafter hold more than 45% of the voting rights in the company is not permitted if there is no other 45% shareholder in the company, in each case, except by way of a tender offer in accordance with the provisions of special tender offer. These anti-takeover limitations do not apply to a purchase of shares by way of a private placement in certain circumstances provided under the Israeli Companies Law.
Approval of M&A Transactions	The DGCL generally requires that a merger and consolidation, or sale, lease, or exchange of all or substantially all of a corporation's assets be approved by the board of directors and by the stockholders in a simple majority. Under the DGCL, unless required by its certificate of incorporation, a surviving corporation need not obtain stockholder approval for a merger if: • each share of the surviving corporation's stock outstanding prior to the merger remains outstanding in identical form after the merger; • such merger agreement does not amend in any respect the certificate of incorporation of	Under the Israeli Companies Law, a merger is generally required to be approved by the shareholders and board of directors of each of the merging companies. A merger will not be approved if it is objected to by shareholders holding a majority of the voting rights participating and voting at the meeting, after excluding the shares held by the other party to the merger, by any person who holds 25% or more of the other party to the merger or any other person on behalf of such other party and by the relatives of and corporations controlled by these persons. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a

	Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
	the surviving corporation; and • either no shares of common stock of the surviving corporation are to be issued or delivered in the merger or, if common stock will be issued or delivered, the number of shares of common stock issued will not exceed 20% of the shares of common stock outstanding prior to the merger. The Arcturus-Delaware Certificate of Incorporation does not specifically require this provision.	reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of any of the parties of the merger. In addition, a merger can be completed only after all approvals have been submitted to the Israeli Registrar of Companies, or the Registrar, and 30 days have passed from the time that shareholder resolutions were adopted in each of the merging companies and 50 days have passed from the time that a proposal for approval of the merger was filed with the Registrar.
Internal Auditor	There is no requirement under the DGCL for a corporation to appoint an Internal Auditor.	According to the Israeli Companies Law, the board of directors of a public company shall appoint an Internal Auditor who shall be appointed at the proposal of the audit committee. The Internal Auditor shall examine, inter alia, whether the company's acts are correct in terms of compliance with the law and of orderly business practice.
Dissenters' or Appraisal Rights	Under the DGCL, stockholders have the right to dissent from any plan of merger or consolidation to which the corporation is a party, and to demand payment for the fair value of their shares as determined in action brought before the Delaware Court of Chancery. However, unless the certificate of incorporation otherwise provides, the DGCL states that stockholders do not have a right to dissent from any plan of merger or consolidation with respect to shares:	A person wishing to acquire shares of an Israeli public company and who would as a result hold over 90% of the target company's issued and outstanding share capital is required by the Israeli Companies Law to make a tender offer for the purchase of all of the issued and outstanding shares of the company. Shareholders may request an appraisal in connection with such a tender offer for a period of six months following the consummation of the tender offer, however the purchaser may stipulate that any tendering

Arcturus-Delaware Stockholder Rights	Arcturus-Israel Shareholder Rights
• listed on a national securities exchange or held of record by more than 2,000 holders; and • for which, pursuant to the plan of merger or consolidation, stockholders will receive only (1) shares or depository receipts of another corporation which at the effective date of the merger or consolidation will be either listed on a national securities exchange or held of record by more than 2,000 holders, (2) shares of stock or depositary receipts of the surviving corporation in the merger or consolidation, (3) cash for fractional shares or (4) any combination of (1) – (3). In addition, the DGCL provides that, unless the certificate of incorporation provides otherwise, stockholders of a surviving corporation do not have the right to dissent from a plan of merger if the merger did not require for its approval the vote of the stockholders. The DGCL also provides that all appraisal actions with respect to shares that were listed on a national securities exchange immediately before the merger shall be dismissed by the Delaware Court of Chancery unless (1) the total number of shares entitled to appraisal exceeds 1% of the outstanding shares of the class or series eligible for appraisal, (2) the value of the consideration provided in the merger for such total number of shares exceeds $1 million or (3) the merger was approved without a stockholder vote pursuant to Sections 253 or 267 of the DGCL.	shareholder surrender its appraisal rights.

THE SPECIAL MEETING

We are furnishing this proxy statement/prospectus to the holders of our ordinary shares in connection with the solicitation of proxies by Arcturus-Israel's board of directors for use at a Special Meeting to consider the Scheme of Arrangement.

General

The Special Meeting will be conducted in accordance with the directions of the Israel Court and the Israeli Law.

Time, Place and Date

The Special Meeting will be held on , 2019 at 8:00 a.m. Pacific time at .

Purpose of the Special Meeting

At the meeting, Arcturus-Israel's board of directors will ask the ordinary shareholders in the capital of Arcturus-Israel to vote to approve the Scheme of Arrangement. If the Scheme of Arrangement is approved and becomes effective, it will effect the Transaction, pursuant to which your ordinary shares of Arcturus-Israel will be transferred to Arcturus-Delaware and you will receive, on a one-for-one basis, new shares of common stock of Arcturus-Delaware for each ordinary share of Arcturus-Israel that has been transferred.

Arcturus-Israel's board of directors has unanimously approved the Scheme of Arrangement and recommends that you vote "FOR" the Arcturus Redomiciliation Proposal.

Record Date; Voting Rights; Votes Required for Approval

, 2019 has been fixed as the Record Date for the Special Meeting.

Only holders of record of Arcturus-Israel ordinary shares on the Record Date are entitled to notice of and to vote at the meeting. You will not be the holder of record of shares that you hold "beneficially." Instead, the depository (for example, Cede & Co., as nominee for DTC) or other nominee will be the holder of record of such shares.

On the Record Date, approximately 10,761,523 ordinary shares in the capital of Arcturus-Israel were outstanding and entitled to be voted at the meeting and we had shareholders of record. A list of shareholders will be available for inspection at least ten days prior to the meeting at . Each Arcturus-Israel ordinary share entitle the holder to one vote.

At the Special Meeting, the presence, in person or by proxy, of the Scheme Shareholders as of the Record Date holding at least two Scheme Shareholders holding at least one-third of the voting rights (including presence by means of proxy or through a voting deed) within an hour from the time specified for the opening of the Special Meeting constitutes a quorum for the conduct of business. A broker "non-vote" occurs when a nominee (such as a broker) holding shares for a beneficial owner abstains from voting on a particular proposal because the nominee does not have discretionary voting power for that proposal and has not received instructions from the beneficial owner on how to vote those shares. Accordingly, it is important for beneficial owners to follow their broker's instructions for providing voting instructions.

Assuming the presence of a quorum, the affirmative vote of 75% of the issued Arcturus-Israel ordinary shares held by the Scheme Shareholders present and voting, either in person or by proxy, at the Special Meeting, is required for the approval of the Arcturus Redomiciliation Proposal.

Pursuant to the directions of the Israel Court, for the purposes of determining the number of Scheme Shareholders present and voting at the Special Meeting, Arcturus-Israel ordinary shares that are deposited in book-entry form with DTC, and registered in the name of CEDE as nominee of DTC and holder of record in the Register of Members of Arcturus-Israel, will be treated as follows:

- CEDE shall be deemed not to be a shareholder of Arcturus-Israel; and
- each sub-depositor shall be deemed to be a Arcturus-Israel shareholder in respect of such number of Arcturus-Israel ordinary shares held in its account under CEDE.

Each sub-depositor need not vote the Arcturus-Israel ordinary shares registered in its name in the same way. Accordingly, a sub-depositor may:

- vote all or part of its Arcturus-Israel ordinary shares "FOR" the Arcturus Redomiciliation Proposal, which part shall be counted as approving the Arcturus Redomiciliation Proposal;
- vote all or part of its Arcturus-Israel ordinary shares "AGAINST" the Arcturus Redomiciliation Proposal, which part shall be counted as against approving the Arcturus Redomiciliation Proposal; and/or
- abstain from voting in respect of all or part of its Arcturus-Israel ordinary shares, which part shall not be counted in determining the Arcturus-Israel ordinary shares which are present and voting on the Arcturus Redomiciliation Proposal.

For purposes of determining whether the Arcturus Redomiciliation Proposal is approved by a majority in number of Scheme Shareholders, if the number of Arcturus-Israel ordinary shares voted "FOR" the Arcturus Redomiciliation Proposal by a sub-depositor exceeds the number of Arcturus-Israel ordinary shares voted "AGAINST" the Arcturus Redomiciliation Proposal by it, such sub-depositor will be taken to have voted "FOR" the Arcturus Redomiciliation Proposal, or if the number of Arcturus-Israel ordinary shares voted "AGAINST" the Arcturus Redomiciliation Proposal by a sub-depositor exceeds the number of Arcturus-Israel ordinary shares voted "FOR" the Arcturus Redomiciliation Proposal by it, such sub-depositor will be taken to have voted "AGAINST" the Arcturus Redomiciliation Proposal.

For the avoidance of doubt, a holder of Arcturus-Israel ordinary shares who is not a sub-depositor may only vote the Arcturus-Israel ordinary shares registered in its name in the same way, and must vote all or part of its Arcturus-Israel ordinary shares either "FOR" or "AGAINST" the Arcturus Redomiciliation Proposal, and not a mixture of both.

A holder of Arcturus-Israel ordinary shares (including a sub-depositor) voting by proxy shall be included in the count of Arcturus-Israel shareholders present and voting at the Special Meeting as if that Arcturus-Israel shareholder was voting in person, such that the votes of a proxy who has been appointed to represent more than one Arcturus-Israel shareholder at the Special Meeting shall be counted as the votes of such number of appointing Arcturus-Israel shareholders.

Each holder of Arcturus-Israel ordinary shares represented in person or by proxy at the Special Meeting is entitled to one vote per Arcturus-Israel ordinary share owned as of the Record Date.

Holders of Arcturus-Israel ordinary shares may file an objection with the Israel Court against the approval of the Scheme of Arrangement, but no appraisal or dissenting rights are available to such holders in connection with a scheme of arrangement effected under Israel law.

Our directors and executive officers have indicated that they intend to vote their Arcturus-Israel ordinary shares in favor of the Arcturus Redomiciliation Proposal. On the Record Date, our current directors and executive officers and their affiliates beneficially owned Arcturus-Israel ordinary shares, which is approximately % in the aggregate of the outstanding Arcturus-Israel shares.

Proxies

A proxy card is being sent to each Arcturus-Israel ordinary shareholder of record as of the record date. If you properly received a proxy card, you may grant a proxy to vote on the Arcturus Redomiciliation Proposal presented in one of the two ways which are explained below under "How You Can Vote."

If you properly complete, sign and date the enclosed proxy card and timely send it to us or timely properly appoint your proxy over the Internet or by telephone, your proxy holder (one of the individuals named on the enclosed proxy card) will vote your Arcturus-Israel ordinary shares as you have directed.

If you do not specify on the enclosed proxy card that is submitted (or when appointing your proxy over the Internet or by telephone) how you want to vote your Arcturus-Israel ordinary shares, the proxy holders will vote them "FOR" the Arcturus Redomiciliation Proposal set forth in this proxy statement/prospectus.

You may abstain on the Arcturus Redomiciliation Proposal by marking "ABSTAIN."

An abstention or broker non-vote on the proposal to approve the Scheme of Arrangement has the effect of a vote not being cast with respect to the relevant shares. As a consequence, such shares will not be considered when determining whether the Arcturus Redomiciliation Proposal has received the required shareholder approval.

You may revoke your proxy at any time **before it is exercised at the Special Meeting** in any of the following ways:

- by notifying Arcturus-Israel's Secretary in writing at: , which notice must be received no later than 8:00 a.m. Pacific time on , 2019;
- by submitting another properly signed proxy card with a later date or another Internet or telephone proxy at a later date, which proxy must be received no later than 8:00 a.m. Pacific time on , 2019; or
- by voting in person at the Special Meeting.

Your proxy will not be revoked merely by attending the Special Meeting. To revoke a proxy, you must take one of the actions described above. If you hold your shares in the name of a broker, custodian or depository, you should follow the instructions provided by your broker in revoking your previously granted instructions.

If you do not appoint a proxy and you do not vote at the Special Meeting, you will still be bound by the outcome. You are therefore strongly urged to attend and vote at the meeting in person or by proxy.

The accompanying proxy is being solicited on behalf of the board of directors of Arcturus-Israel. We will also reimburse brokers for their reasonable out-of-pocket expenses for forwarding proxy materials to beneficial owners or other persons for whom they hold Arcturus-Israel ordinary shares. The directors, officers and employees of Arcturus-Israel may also solicit proxies by personal interview, mail, email, telephone, facsimile or other means of communication. These persons will not be paid additional remuneration for their efforts. Subject to applicable law, Arcturus-Israel may also reimburse brokerage houses and other custodians, nominees, and fiduciaries for their expenses for forwarding proxy materials to the beneficial owners of Arcturus-Israel ordinary shares and in obtaining voting instructions from such beneficial owners. The extent to which this will be necessary depends upon how promptly proxies are returned. We urge you to send in your proxy without delay.

How You Can Vote

If you are a Scheme Shareholder who is a Registered Holder, you can vote your Arcturus-Israel ordinary shares directly by attending the Special Meeting and casting your vote in person or by completing and returning a

proxy card, which when properly executed and received by Arcturus-Israel, will be voted at the Special Meeting in accordance with your instructions set forth in the proxy. Under Israel law, the Registered Holder may not vote their shares over the Internet and so must return a proxy card by mail or in person at the Special Meeting to vote their shares. If you are a Scheme Shareholder who is a DTC Participant, vote your shares through DTC's procedures. Your shares must be voted no less than 24 hours prior to the meeting, or such longer time as may be specified by DTC or its participants. If you hold your ordinary shares in "street name," please vote in accordance with the instructions provided by your broker. Most "street name" holders, or beneficial owners holding through a broker, may also vote by telephone or by Internet, in accordance with instructions provided by their broker. All shares entitled to vote and represented by properly completed proxies received prior to the Special Meeting and not revoked will be voted at the Special Meeting in accordance with your instructions. If you are a Scheme Shareholder who is a Registered Holder and you return a signed proxy card without indicating how your shares should be voted on a matter and do not revoke your proxy, the shares represented by your proxy will be voted as the Board recommends, and therefore, "FOR" the approval of the Arcturus Redomiciliation Proposal.

Any Scheme Shareholder entitled to vote at the Special Meeting that has submitted a proxy has the right to revoke his or her proxy at any time prior to voting at the Special Meeting by (i) submitting a subsequently dated proxy, which, if not delivered in person at the meeting, must be received by us no less than 24 hours before the appointed time of the meeting or (ii) by attending the meeting and voting in person. You can submit your subsequently dated proxy to Arcturus-Israel at c/o Continental Stock Transfer & Trust, 1 State Street, 30th Floor, New York, NY 10004-1561. Attendance at the Special Meeting will not, by itself, revoke your proxy; you must elect to vote in person at the Special Meeting in order to revoke or change your vote. If you are a Scheme Shareholder who is a DTC Participant and would like to change your voting instruction, you should follow DTC's or the relevant participant's procedures for changing your vote instructions. If you hold ordinary shares in "street name" through a broker and would like to change your vote instruction, you should follow the directions provided by your broker. Most brokers provide means by which "street name" holder may vote by telephone or by Internet, as well as by signing and returning voting instructions.

If the Special Meeting is postponed or adjourned, as a Scheme Shareholder your proxy will remain valid and may be voted at the postponed or adjourned meeting. You will still be able to revoke your proxy until it is voted.

Proxies received at any time before the Special Meeting, and not revoked or superseded before being voted, will be voted at the Special Meeting. A validly signed proxy will be voted in accordance with the specification.

Subject to space availability, all Arcturus-Israel shareholders as of the Record Date, or their duly appointed proxies, may attend the Special Meeting. Since seating is limited, admission to the meeting will be on a first-come, first-served basis. Registration and seating will begin at 8:00 a.m. Pacific time on March 23, 2019. Each Arcturus-Israel shareholder, or their duly authorized representative, will be asked to present valid photo identification issued by a government agency, such as a driver's license or passport and, if applicable, evidence of such person's authorization to represent a Arcturus-Israel shareholder.

If your Arcturus-Israel ordinary shares are held in the name of a bank, broker, custodian, nominee or other holder of record and you plan to attend the Special Meeting, you must present proof of your beneficial ownership of Arcturus-Israel ordinary shares, such as a recent bank or brokerage account statement, together with a form of personal identification and proof of address to be admitted to the Special Meeting. If you would rather have an admission ticket, you can obtain one in advance by mailing a written request, **along with proof of your beneficial ownership of Arcturus-Israel ordinary shares**, to:

Arcturus Therapeutics Ltd.
10628 Science Center Drive, Suite 250
San Diego, CA 92121
U.S.A.

Even if you establish proof of your beneficial ownership and/or have a valid admission ticket, you will not be entitled to vote at or otherwise participate in the meeting unless you are a Scheme Shareholder entitled to vote at the Special Meeting.

Validity

In accordance with Arcturus-Israel's Articles of Association, Peter Farrell, Chairman of Arcturus-Israel's board of directors will serve as the chairperson of the Special Meeting. (or failing him any other director of Arcturus-Israel) has been appointed by the Israel Court as Chairman of the Special Meeting. The Chairman of the Special Meeting will count the votes, determine the existence of a quorum, validity of proxies and ballots, and certify the results of the voting.

THE BUSINESS OF ARCTURUS THERAPEUTICS LTD.

Introduction

Arcturus Therapeutics Ltd. ("we," "us," "Arcturus," or the "Company") is an RNA medicines company focused on significant opportunities in rare diseases with a current focus on liver and respiratory diseases. In addition to our internal mRNA platform, our proprietary lipid nanoparticle deliver system, LUNAR®, enables multiple nucleic acid medicines. The Company's internet address is https://arcturusrx.com/. The Company was founded in 2013. On November 15, 2017, Alcobra Ltd. acquired Arcturus Therapeutics, Inc. ("Arcturus Inc.") pursuant to a merger between the companies. Immediately after giving effect to the merger, on November 15, 2017, Alcobra Ltd. changed its name to Arcturus Therapeutics Ltd. On November 16, 2017, the Company commenced trading on the Nasdaq Global Market under the symbol "ARCT." On February 11, 2019, we disclosed our intention to initiate a process to redomicile from an Israeli limited company to a U.S. corporation, as described more fully under "Redomiciliation," below.

The Company's principal executive offices are located in San Diego, California. Our key proprietary technology has the potential to address the major hurdles in RNA development, namely the effective and safe delivery of RNA therapeutics to disease-relevant target tissues. We believe the versatility of our platform to target multiple tissues, its compatibility with various nucleic acid therapeutics, and our expertise in developing scalable manufacturing processes puts us in a good position to deliver on the next generation of nucleic medicines.

- We have deep expertise in the discovery and development of RNA medicines, including key experience in the production of RNA drug substance and nanoparticle-formulated drug product.
- We have a pipeline of seven drugs in late-stage discovery and early-stage development: two wholly-owned and five pharma partnered programs.
- We have developed a novel lipid-mediated delivery technology platform called LUNAR® which draws from a growing library of over 150 proprietary lipids intended to enable safer and more efficient delivery of RNA medicines.
- Our wholly-owned, LUNAR® and nucleic acid technologies are covered by a patent portfolio of 152 patents and patent applications, issued in the United States, China, Europe, Japan and other countries.

We believe that we can use our proprietary technologies to develop RNA medicines in multiple therapeutic approaches: (1) mRNA, DNA, and replicon protein replacement for therapeutics and protein delivery for vaccines; (2) siRNA, microRNA, and antisense oligonucleotides—knockdown of genes overexpressed in disease; and (3) CRISPR, TALEN, zinc finger proteins, megatals and meganucleases—gene editing of errant genes.

Recent Developments

Redomiciliation

On February 11, 2019, we disclosed our intention to initiate a process to redomicile from an Israeli limited company to a U.S. corporation. The final form and timing of the redomiciliation has not yet been finalized and the redomiciliation is subject to the approval of our shareholders, Israeli court approval and approval by the U.S. Securities and Exchange Commission (the "SEC") and the NASDAQ Stock Market LLC ("Nasdaq"), among other conditions precedent. On February 11, 2019, we filed an application with the Tel Aviv District Court to approve the convening of a general shareholders meeting of the Company for the approval of the redomiciliation pursuant to Sections 350 and 351 of the Israeli Companies Law (the "Companies Law").

In connection with the redomiciliation, the Company entered into a share exchange agreement between the Company and a special-purpose company, Arcturus Therapeutics Holdings Inc. ("NewCo") (the "Share Exchange Agreement") in connection with the contemplated redomiciling of the Company from Israel to

Delaware (the "Redomiciliation"). Pursuant to the Share Exchange Agreement, and in order to effectuate the transactions contemplated by the Share Exchange Agreement, on February 11, 2019, the Company filed an application with the Tel Aviv District Court to approve the convening of a general shareholders meeting of the Company for the approval of the Redomiciliation pursuant to Sections 350 and 351 of the Companies Law, 1999-5759. The Share Exchange Agreement and the Redomiciliation are subject to shareholder approval as required by the Companies Law, Israeli court approval, effectiveness of filings to be made with the SEC, approval of the listing of shares of NewCo by the NASDAQ Stock Market LLC ("Nasdaq") and the other conditions precedent set forth in the Share Exchange Agreement (the "Conditions Precedent").

In furtherance of the Redomiciliation, the holders of ordinary shares of the Company as of a future record date and the holders of options to purchase ordinary shares of the Company as of the same record date will transfer their ordinary shares of the Company and options to purchase ordinary shares of the Company, respectively, to NewCo and, in exchange thereof, will receive one share of common stock of NewCo for each ordinary share of the Company and one option to purchase one share of common stock of NewCo in exchange for each option to purchase an ordinary share of the Company, respectively.

The Company intends the common stock of NewCo to be listed on NASDAQ. Upon consummation of the transactions contemplated by the Share Exchange Agreement, it is expected that the Company's ordinary shares will be delisted from trading on NASDAQ, and the Company is expected to become a private company (as defined in the Companies Law) wholly-owned by NewCo.

Pursuant to the Share Exchange Agreement, the Company also agreed, subject to the Conditions Precedent set forth therein, to transfer all of the shares of Arcturus Therapeutics Inc. ("Arcturus Sub"), a wholly-owned subsidiary of the Company, to NewCo through a reduction of the Company's equity and the distribution of a dividend-in-kind, such that Arcturus Sub and the Company shall each become a wholly-owned and direct subsidiary of NewCo.

Ornithine Transcarbamylase (OTC) Deficiency Development Program

On February 11, 2019, the Company announced the termination of the obligations of CureVac AG for the preclinical development of ARCT-810, effective 180 days from February 5, 2019 and the re-assumption by the Company of the worldwide rights thereto. Arcturus will reassume 100% global rights for its flagship asset, clinical development candidate ARCT-810, a messenger RNA (mRNA) drug to treat OTC deficiency. ARCT-810 was previously subject to a 50/50 collaboration between Arcturus and CureVac AG. CureVac elected not to continue its obligations for the development of ARCT-810 under and pursuant to the terms of the collaboration.

The preclinical development program for ARCT-810, including Investigational New Drug Application (IND) enabling studies, remains on track. Arcturus is planning to file an IND for ARCT-810 with the U.S. Food and Drug Administration (FDA) in the fourth quarter of 2019.

Pursuant to the terms of the Co-Development Agreement, CureVac is obligated to continue to fund its share of the preclinical expenses for the OTC program until August 5, 2019.

Current Technologies and Limitations

Messenger RNA can be immunogenic. The current lipid nanoparticle technology used to deliver mRNA therapeutics are also limited by their propensity to cause immune responses. This decreases the tolerability of the medicine. These delivery systems are not biodegradable, which causes accumulation of these lipids in cells upon repeat dosing. Each of these aspects of current lipid nanoparticle delivery systems is expected to ultimately limit the utility and therapeutic reach of the RNA therapies they deliver.

Arcturus aims to mitigate the immune response and tolerability issues associated with the LNP mRNA delivery with the development of both less immunogenic mRNAs and biodegradable lipids. The Company has developed processes for the scale up of LNP-mRNA therapeutics to support clinical development.

mRNA therapeutics offer an attractive promise that other RNA medicines cannot provide—to *increase* the production of a protein in the body that is either defective or expressed at low levels to improve symptoms of a genetic disease without interacting with the patient's genetic code. mRNA therapies have yet to be successful in delivering an approved therapy to patients because of the technical hurdles facing this therapeutic approach. These hurdles include:

- delivery of an intact mRNA, which is much larger than other RNA drugs, to the target organ and cell type needed for a therapeutic effect;
- inefficient translation into the therapeutic protein;
- short duration of effect of the mRNA medicine and
- tolerability issues associated with therapeutic RNAs.

Arcturus' lipid-mediated delivery platform is designed to address many of the technical issues encountered to date for this very promising area of RNA medicines.

RNA Medicines, Markets and Arcturus' Technology

There is a significant, unmet medical need in the field of rare genetic diseases. The World Health Organization (WHO) estimates that 10,000 diseases are caused by an error, or mutation, in a single gene, and currently no FDA-approved drug exists for over 95% of known, rare genetic diseases. Moreover, these diseases affect one in a hundred people at birth, and 350 million people worldwide live with a rare genetic disease. Many of these diseases cause moderate to severe symptoms, significantly decreasing quality of life and life expectancy.

Nucleic acid medicines have the potential to treat diseases caused by genetic mutations, including diseases that cannot be treated by conventional drugs, such as small molecules and biologics. Some of these medicines function by providing the means for producing a deficient yet vital protein *in vivo*. Within a cell, DNA carries the blueprint, in the form of genes, from which all proteins necessary for life are encoded. Each gene has the code, carried by a nucleic acid molecule called messenger RNA ("mRNA"), informing the cell's machinery the pattern of building blocks for making one or more proteins needed for normal biological function.

Nucleic acid therapeutics represent a significant advancement in targeted medicines and several of this class of therapeutics are being developed by public and private companies. These therapies have three general objectives:

- to reduce the amount of a target protein in a patient by binding to and destroying the associated target mRNA (antisense and small interfering RNA (siRNA));
- to increase the amount of a functioning target protein by introducing a functional gene or mRNA that encodes for a protein that replaces a malfunctioning protein (mRNA therapy, CRISPR, gene therapy, replicon); and
- to introduce proteins from viruses or malfunctioning proteins in certain cancers to train the immune system to recognize and clear these proteins (nucleic acid vaccines).

siRNA therapies, double-stranded RNA compounds that activate machinery in the cell to destroy a target RNA in the body, are useful in treating diseases caused by viral infections, malfunctioning proteins or an excess of certain proteins that contribute to the severity of symptoms of a disease. siRNA compounds are designed to bind perfectly to one mRNA and trigger machinery in the body to cause the cell to destroy the disease-causing mRNA. This mechanism, called RNA interference ("RNAi"), can be used to prevent mutated genes from being translated into defective proteins that cause disease and can stop viruses from replicating inside the body.

Naked RNA and some DNA molecules are quickly degraded by enzymes in the bloodstream and can cause a strong immune response. Therefore, nucleic acid medicines (mRNA, DNA and siRNA) developed for systemic use must use a vector to deliver the nucleic acid medicine to target cells. Viral delivery vectors and lipid-mediated delivery systems are the two main delivery systems used in a large number of nucleic acid-based therapeutics in development.

Viral delivery vectors are very effective at delivering DNA to alter the genetic make-up of the patient's cells. However, they can cause liver damage and activate an immune response in human patients. Viral vectors may also cause accidental mutations in host DNA. Patients treated with viral vectors can also develop antibodies against these vectors that make the treatment less effective over time.

Lipid-mediated delivery systems are the most common non-viral vectors because they are biocompatible and do not cause insertional mutagenesis. They can also be manipulated to target specific cells in the body. In 2018, the first siRNA therapy using a lipid-mediated delivery system was approved by the FDA for the treatment of polyneuropathy associated with hereditary transthyretin (hTTR) amyloidosis, Onpattro® (Patisiran). Despite these advantages, older lipid-mediated delivery systems, like that utilized in Onpattro®, can stimulate adverse immune responses, requiring co-administration of steroids, and cause liver damage in patients due to their inability to be degraded by the body.

Our Platform Technology

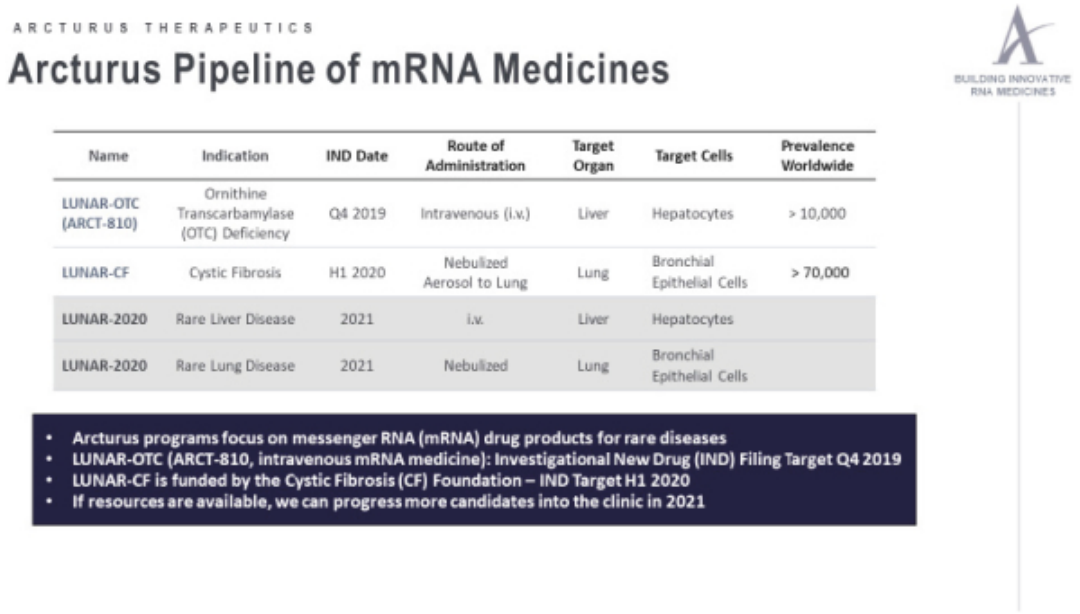
LUNAR

Our LUNAR® lipid-mediated delivery technology includes a diverse, growing library of over 150 proprietary lipids that we rationally designed to be versatile, maximizing efficacy and increasing tolerability of a diverse selection of nucleic acids, target cell types and routes of administration. A key feature of our LUNAR lipids is their biodegradability, decreasing the undesired effects caused by lipid accumulation that are associated with tolerability issues present in other lipid-mediated RNA medicine delivery platforms. Our experienced team continues to innovate in the area of producing LUNAR lipid formulated nucleic acid medicines in a scalable and highly-reproducible manner, reducing the costs of goods for the therapies in our pipeline.

In addition to our LUNAR lipid-mediated delivery technology, we believe we have created innovative, proprietary improvements to producing mRNA medicines, including improvements that increase purity, scalability, efficiency in production times, and adaptability to different mRNA modification strategies. We strive to use these proprietary innovations to benefit each mRNA medicine in our pipeline.

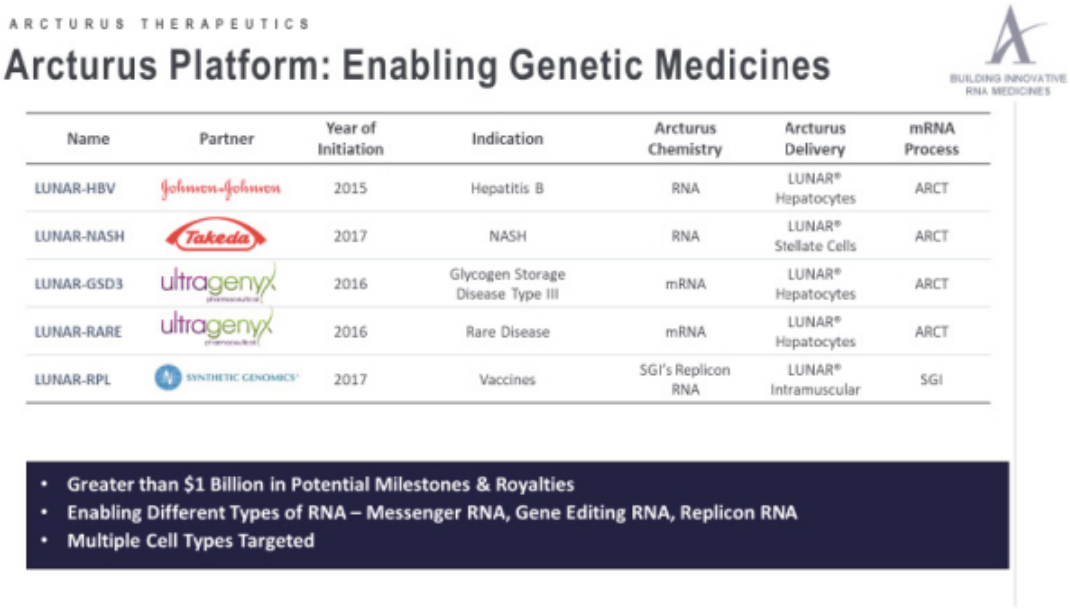
We continue to invest in our LUNAR lipid-mediated delivery of mRNA (encoding CRISPR, TALEN, zinc finger proteins, and meganucleases), siRNA, DNA, microRNA, and antisense oligonucleotide technology platforms to improve their efficacy and safety profile, further expanding their applications. This investment had led to key innovations ensuring optimal characteristics of our LUNAR formulated drug product are attained, which we believe sets us apart from other nucleic acid therapeutics and lipid-mediated delivery platforms.

Our Pipeline



We are using our proprietary technology to develop nucleic acid medicines to treat diseases with unmet medical needs, accelerated clinical paths and clear commercial opportunities. Our preclinical pipeline currently has seven active preclinical drug discovery and development programs. This includes wholly-owned programs as well as programs in partnership with Ultragenyx Pharmaceutical, Inc. ("Ultragenyx"), Takeda Pharmaceutical Company Limited ("Takeda"), Janssen Pharmaceuticals, Inc., one of the Janssen Pharmaceutical Companies of Johnson & Johnson ("Janssen"), Synthetic Genomics, Inc. ("Synthetic Genomics" or "SGI") and CureVac AG ("CureVac").

- The LUNAR-OTC program is developing mRNA compounds to treat ornithine transcarbamylase ("OTC") deficiency, a life-threatening genetic disease that affects greater than 10,000 people. We have achieved preclinical proof-of-concept for LUNAR-OTC in a mouse model of the disease. This program was previously co-developed with CureVac, but will become a wholly-owned internal program in August of 2019.
- The LUNAR-CF program is developing mRNA compounds to replace dysfunctional cystic fibrosis transmembrane conductance regulator ("CFTR") protein in cystic fibrosis ("CF") patients. CF is a common genetic disease in the United States, and approximately 1,000 patients are newly diagnosed each year. This program is supported by Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT. We have demonstrated activity of an optimized CFTR mRNA in cultured cells and proof of concept for LUNAR delivery to lung epithelial cells *in vivo*.
- LUNAR-RLD is an internal research effort focused on target validation of multiple pipeline LUNAR-mRNA program candidates. A rare liver disease will be selected as a future development program based on these efforts.



- We are partnering with Janssen, a Johnson & Johnson company, to develop nucleic acid-based products for the treatment of hepatitis B virus infection ("HBV") and potentially other infectious and respiratory diseases.
- We are partnering with Takeda to develop nucleic acid-based therapeutic candidates for the treatment of primarily liver fibrosis. The agreement was entered into on March 8, 2019.
- We are partnering with Ultragenyx to develop up to ten mRNA therapeutic candidates for certain rare disease targets. LUNAR-GSD3 is the first program to be disclosed from the collaboration. Glycogen Storage Disease Type 3 ("GSD") is caused by genetic mutations in the glycogen debranching enzyme, AGL, which leads to glycogen accumulation in liver and muscle. There are approximately 10,000 patients worldwide with this type of GSD, who experience enlarged liver, increased fats in the blood, low blood sugar, decreased stature and late-onset muscle weakness. There is not currently a cure for GSD3. Treatment typically includes a high-protein diet with cornstarch supplementation to maintain a normal level of glucose in the blood.
- We have a license and collaboration agreement with SGI focused on developing vaccines and therapeutics using their proprietary self-replicating (replicon) nucleic acid technology. We have demonstrated proof-of-concept in preclinical animal models for both vaccines and therapeutics.
- We are partnering with Providence Therapeutics Inc. ("Providence") to identify and optimize microRNA modulators and/or mimetics for the treatment of neoplastic diseases.

Our Strategy

We aim to leverage our proprietary and licensed intellectual property relating to LUNAR and our nucleic acid technologies to develop a pipeline of mRNA therapeutics for infectious rare diseases and rare genetic disorders with significant unmet medical needs. In addition to our collaborations noted above, we are focused on balancing our portfolio with internally-owned and partnered programs to advance our preclinical candidates in a timely and cost-effective manner.

Our flagship program, LUNAR-OTC, is on track to enter first-in-human studies during 2020.

Our business strategy has three main areas of focus:

- *Drive existing collaborations to achieve first-in-human data for our LUNAR lipid-mediated delivery platform.* The value and promise of our proprietary LUNAR lipid-mediated delivery platform has been recognized by our current partners and continuing partner interest. This value is expected to increase substantially when our pre-clinical data from our LUNAR formulated mRNA medicines is reproduced in our first human clinical studies. We continue to push our first mRNA therapeutic, LUNAR-OTC, toward the clinic and our LUNAR-CF program is supported by our important collaboration with the CF Foundation.
- *Leverage our LUNAR lipid-mediated delivery platform to develop therapeutics for a broad range of additional rare liver and lung diseases.* We have demonstrated in preclinical models the utility of the LUNAR lipid-mediated delivery platform in two important liver cell types, stellate and hepatocyte, as well as bronchial cells in lungs. Our research teams are currently focused internally on discovering our next wave of innovative mRNA medicines, and externally for other nucleic acid modalities, for patients with debilitating rare diseases.
- *Continue to innovate in our core areas of research, including mRNA design and siRNA design, LUNAR lipid formulations and formulation production to increase our competitive advantage over other nucleic acid medicine companies.* Our team has a wealth of research and development experience in the areas of siRNA and mRNA medicine design. We continue to identify new and better ways to design and produce these important nucleic acid medicines, increasing their efficacy and safety profiles. In addition, our team has an advanced understandings of lipid-nanoparticle formulations, continually improving scalability and reproducibility of our LUNAR formulated nucleic acid drug products, translating to better therapies for patients.

Our Competitive Strengths

We believe our proprietary LUNAR lipid-mediated delivery and nucleic acid technologies, extensive intellectual property portfolio and experienced research and development team will enable us to advance our drug candidates and existing partnerships, and further partner our technology platform thereby expanding future development and commercial opportunities.

We believe that our competitive strengths include the following, among other areas:

- *LUNAR lipid-mediated delivery technology is applicable to all nucleic acid medicines being developed today that require a formulation:* Preclinical studies have shown that LUNAR delivery technology is compatible with different types of nucleic acids therapeutics, including mRNA, self-amplifying mRNA (or replicon), siRNA, microRNA, antisense oligonucleotides and other oligonucleotide therapeutic approaches. We can combine our LUNAR technology with mRNA therapies that encode for a wide array of therapeutic proteins, including transmembrane proteins (such as transporters, GPCRs, and receptors), secreted proteins (such as hormones and antibodies), engineered nucleases (CRISPR and TALEN), engineered antigen receptors (CAR-T) and intracellular proteins (chaperones, enzymes, intrabodies). We also have pre-clinical data demonstrating proof-of-concept for LUNAR delivery of DNA-based vaccines and therapeutics. The broad applicability of our LUNAR delivery technology is a distinct value driver.
- *LUNAR lipid-mediated delivery technology is applicable to different tissues and cell types via multiple routes of administration.* Most nucleic acid drugs that are marketed or in development are primarily active in liver cells called hepatocytes. Pre-clinical studies have shown that LUNAR can deliver nucleic acid therapies to the liver to hepatocytes and hepatic stellate cells via intravenous injection. Our ability to deliver nucleic acid medicines to both of these cell types provides us a distinct advantage

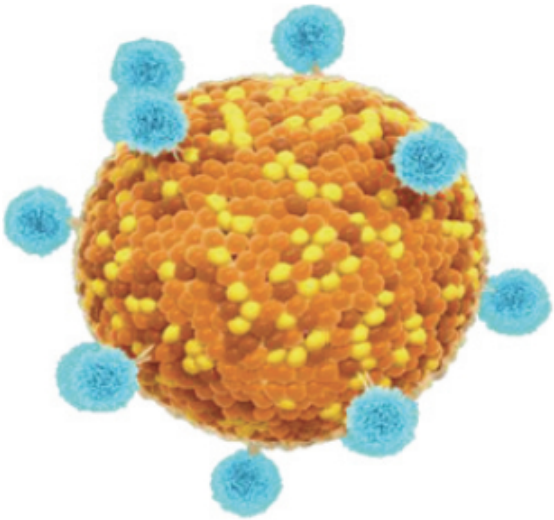
over other technologies that preferentially deliver to hepatocytes only, as stellate cells are key contributors to liver disease progression, including fibrosis and liver cancer. We have also demonstrated functional delivery of LUNAR-formulated mRNA to lung cells through nebulized, inhaled administration. This is the foundation of our LUNAR-CF program and may pave the way for additional therapies to treat rare lung disorders. Additionally, preclinical studies in rodents have shown that LUNAR can deliver nucleic acid compounds to muscle cells via intramuscular injection and retinal cells via subretinal intravitriol, an injection to the back of the eye.

- *Ability to repeat dose.* Multiple preclinical studies in rodents and non-human primates have shown no reduction in efficacy upon repeat dosing of LUNAR formulated RNA medicines (siRNA or mRNA). We believe this indicates that LUNAR-delivered nucleic acids may not elicit antibody or cell-mediated immunity that can reduce potency upon repeat dosing.
- *Experienced team.* Our team has extensive experience in the discovery and development of nucleic acid medicines, as well as experience and know-how in lipid-mediated delivery technology. This combination of in-house expertise uniquely positions us to develop innovative, proprietary novel nucleic acid technologies and nucleic acid medicines.
- *Our intellectual property portfolio.* Our LUNAR and nucleic acid technologies are wholly owned by us and covered by our patent portfolio of 152 patents and patent applications, issued in the United States, China, Europe, Japan and other countries. Our intellectual property portfolio serves as a barrier-to-entry for competitors and, since it is wholly-owned and not licensed, does not carry with it down-stream economics which is different than most other pre-clinical stage companies.
- *Ability to develop high barrier-to-entry products with rapid development of subsequent products with lower costs and risks*. The properties of our proprietary technologies, outlined above, allow us to develop high barrier-to-entry nucleic acid medicines. We expect that the versatility of our two development platforms will allow us to develop subsequent products relatively quickly with less risk and lower costs.

Key Attributes of Our LUNAR Lipid-Mediated Delivery Technology

We have designed our LUNAR lipid-mediated delivery platform to address major challenges with nucleic acid medicine delivery, including transfection efficiency, adverse immune reactions and liver damage. See below for a graphic representation of our LUNAR formulation, where blue spheres represent polyethylene glycol (“PEG”) lipids and the orange, darker orange, and yellow spheres represent the proprietary Arcturus (ATX) lipid excipient and other structural components (phospholipid and cholesterol).

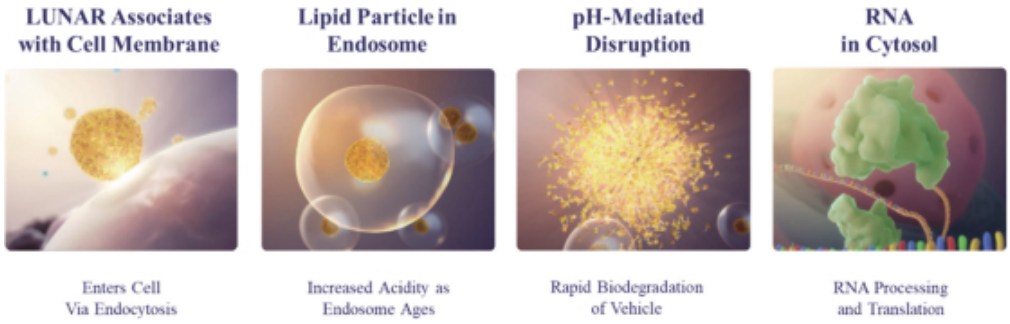
Graphic of LUNAR



LUNAR formulations are a multi-component, lipid-mediated drug delivery system that utilizes our proprietary lipids, called ATX lipids. Each of our ATX lipids contains an amino head group and a biodegradable lipid backbone. The amino head group is a key chemical component of the ATX lipid, making it pH-sensitive and providing it distinct advantages as a component of our LUNAR formulation. At acidic pH, ATX lipids are positively charged, facilitating interaction with the negatively charged nucleic acid, thereby enabling LUNAR particle formation. At physiological pH (e.g., pH 7.4), LUNAR formulations are neutrally charged, avoiding the toxicity often seen with permanently positively-charged lipid-mediated delivery technology, used by other RNA medicine companies. Upon uptake into a cell, by a process called endocytosis that forms a cellular structure called an endosome around the LUNAR formulated nucleic acid therapeutic, the amino head group again becomes positively charged, disrupting the endosome and the LUNAR particle and releasing the nucleic acid therapeutic into the cell.

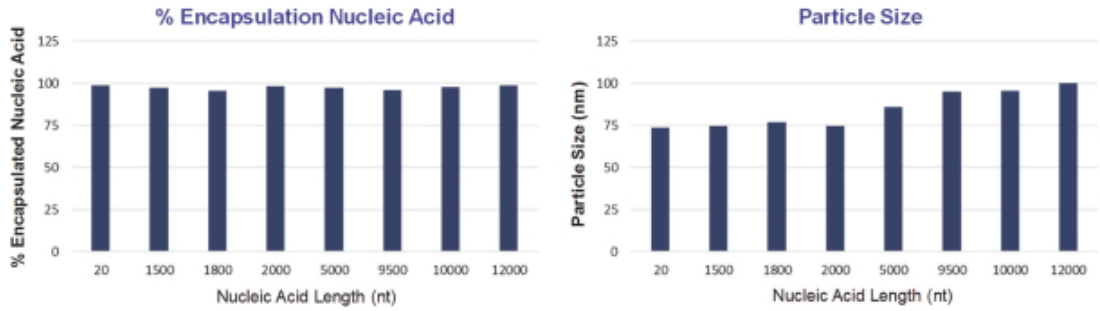
LUNAR-mediated delivery of a nucleic acid therapeutic into cells

The disruption of the LUNAR particle also releases the components of the formulation into the cell, where the ATX lipid is degraded by enzymes in the cell allowing for the lipids to be cleared from the cell. We designed the ATX lipid to be biodegradable by engineering chemical structural components called esters into the ATX backbone that are sensitive to cellular enzymes called esterases. This degradation prevents ATX lipids from accumulating inside the cell and causing toxicity.



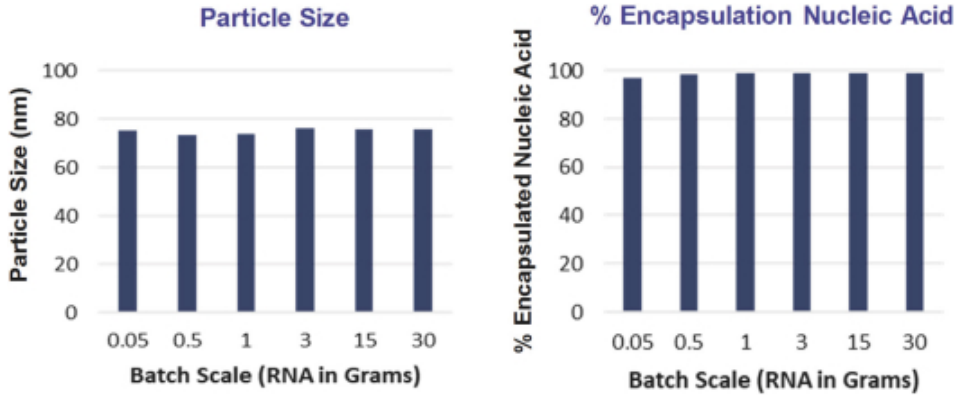
LUNAR compatibility with nucleic acids of various size

We have generated a growing library of over 150 proprietary ATX lipids. ATX lipids are rationally designed to fit the application and vary depending on the target cell type and route of administration. We perform extensive formulation screening for each nucleic acid therapeutic to determine the optimal ATX lipid and LUNAR composition for the particular nucleic acid therapeutic, the desired route of administration and target cell type. We have demonstrated high encapsulating efficiency when formulating a wide range of nucleic acid sizes, 20 to 12,000 nucleotides in length (figure below, left) and particle size was within the acceptable range to maximize targeting and efficacy (figure below, right).

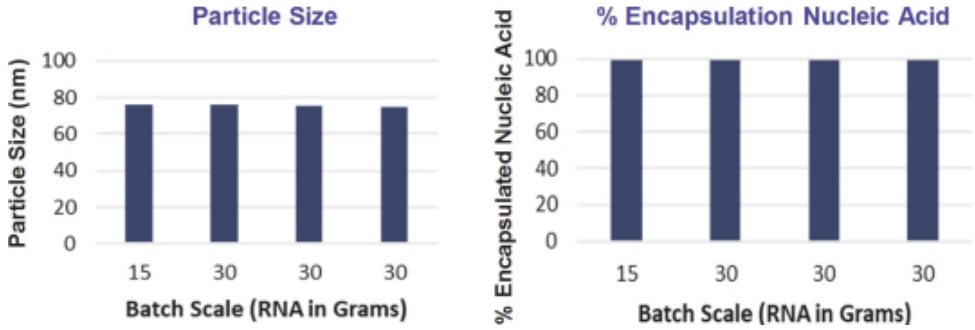


LUNAR Scalability

We have extensively characterized the safety and efficacy profile of first-generation LUNAR 1.0 in rodents and non-human primates and have confirmed its scalability for manufacturing. To test consistency across batch size, we tested batches from 50 milligrams to 30 grams (figure below), and to test reproducibility we tested three different batches of 30 grams each. In both experiments, we demonstrated the LUNAR formulation process is both scalable and reproducible, maintaining both particle size and encapsulation percentage independent of batch size.



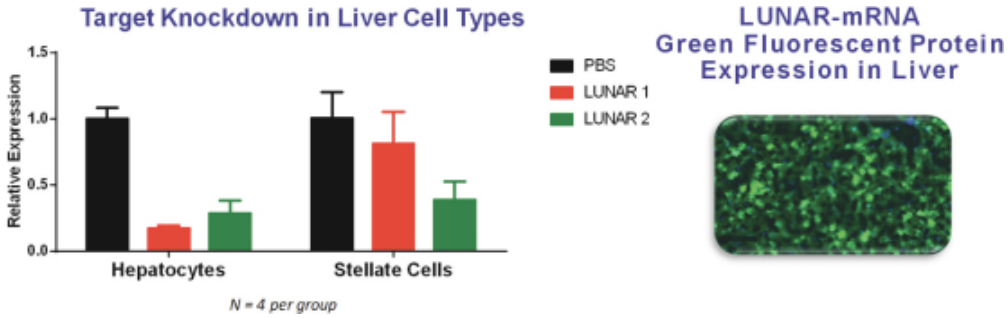
LUNAR Reproducibility



LUNAR In Vivo Proof-of-Concept Data

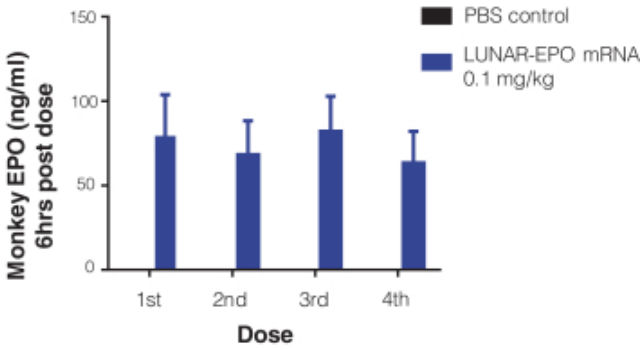
LUNAR formulations can be designed to target different cell types in the liver

We have optimized LUNAR to deliver nucleic acid therapeutics preferentially to different cell types in the liver after intravenous (IV) delivery. When mice were treated with a single intravenous dose of two different LUNAR-siRNA formulations, significant target mRNA knockdown was observed in hepatocytes 72 hours post-treatment (figure below, left). Shown in green, the composition of a different LUNAR-siRNA formulation was modified to also achieve significant target mRNA knockdown in stellate cells, an important cell type for certain liver indications, such as NASH. The hepatocyte-targeting (formulation 1, red bars) was also used to formulate a green fluorescent protein (GFP) mRNA and mice were treated with a single IV dose (figure below, right). 24 hours later, GFP protein was seen throughout the liver, particularly in hepatocytes.



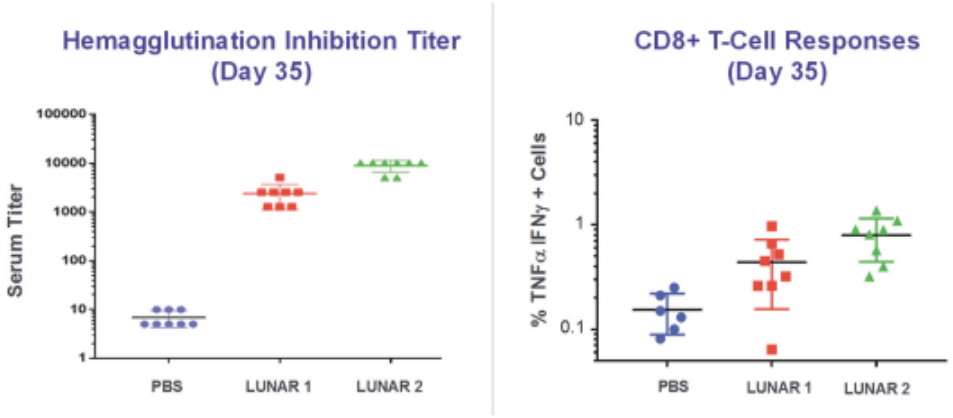
Repeat dose efficacy in non-human primates

To demonstrate efficacy of LUNAR-mRNA in a repeat-dose setting, we treated non-human primates once weekly for four weeks with LUNAR-formulated erythropoetin (EPO) mRNA (figure below). EPO protein expression levels were determined 6 hours following each treatment, and elevated serum EPO levels were maintained following each treatment.



Antigen-specific responses following IM delivery of LUNAR-mRNA in influenza vaccination mouse model

We have demonstrated in proof-of concept studies in mice the utility of LUNAR-formulated mRNA in oncology and infectious disease vaccine applications. Mice were treated at Day 0 (prime) and Day 21 (boost) via intramuscular delivery with 0.5 mg/kg LUNAR-encapsulated hemagglutinin mRNA (2 formulations; LUNAR 1 and LUNAR 2). At Day 35, serum titers were determined in a hemagglutination inhibition assay (figure below, left) and antigen-specific cytokine production was evaluated from CD8+ T-cells (figure below, right). With both formulations tested, titers between 10^3-10^4 were achieved and a significant increase in % of TNFα and IFNα expressing cells was observed.



Our Proprietary mRNA and Protein Design Technology

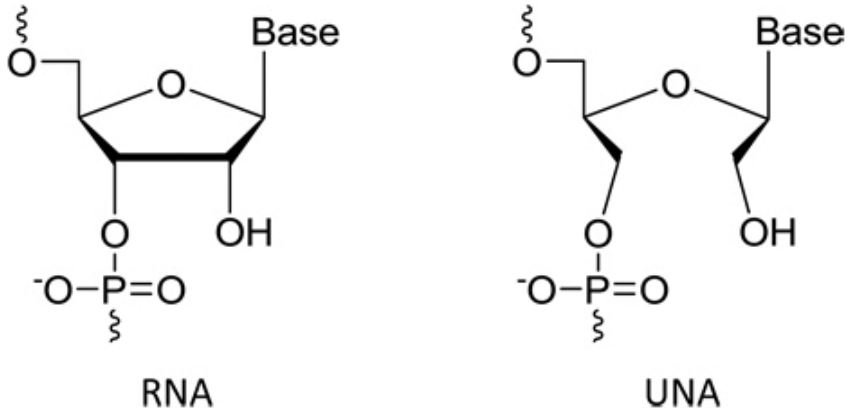
Arcturus has developed in-house expertise in protein and mRNA design to benefit the mRNA programs in its pipeline to address many of the known challenges that face the viability of mRNA therapeutics today. Arcturus has identified several design elements of mRNA compounds that provide improved translation (conversion from mRNA to protein) of our mRNA therapeutics, including untranslated regions derived from species that have not previously been combined with human mRNA sequences. This platform technology is applicable to many different human mRNA sequences that we currently are approaching in our discovery efforts. We have also identified ways to engineer human protein sequences to increase the half-life of the proteins produced by our mRNA therapies as well as directing specific types of proteins more efficiently to certain cellular structures of interest. These innovations are broadly applicable to several programs that are part of our mRNA discovery efforts.

In addition to these platform technologies, Arcturus has developed a proprietary tool to aid our team in the efficient design and development of new mRNA drugs. Arcturus' mRNA Design Suite is a cloud-based software suite with a collection of proprietary bioinformatic algorithms aimed at achieving highly improved potency of a drug substance through optimization of mRNA sequences. The algorithms were developed in house through the integration of experimentally validated optimization processes. Through multi-layered *in silico* QC pipelines, mRNA Design Suite promptly generates error-free sequences in its highest quality accompanied by various statistics. Additionally, mRNA Design Suite seamlessly interacts with Arcturus plasmid/mRNA production database to accelerate the process from mRNA design to gene synthesis, cloning, and mRNA production.

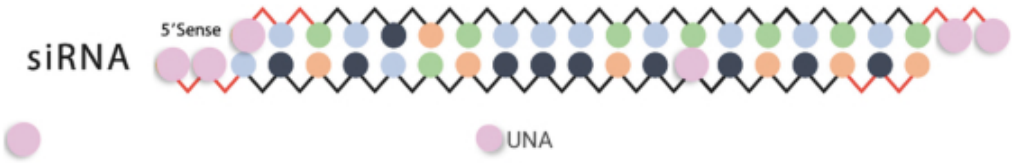
Our Unlocked Nucleic Acid (UNA) Oligomer Chemistry

UNAs are RNA analogues in which the C2'-C3' bond of the ribose ring is absent (figure below). UNA chemistry technology can potentially be applied to multiple types of RNA medicines including mRNA, siRNA, microRNA and guide RNAs for gene editing. One or more UNAs can be positioned strategically along a nucleic acid strand to manipulate the chemical properties of the molecule.

RNA structure compared with UNA structure



UNAs can potentially improve the efficiency and specificity of siRNA-mediated protein suppression. siRNAs are short double-stranded RNA molecules. Once inside the cell, they become part of the RNA-induced silencing complex ("RISC") and are split into two single siRNA strands. One of these strands stays with RISC and binds to any mRNA with a complementary sequence. If the wrong siRNA strand stays with RISC, it can bind to different mRNAs than the target mRNA and therefore inhibit translation of other proteins. This is an undesired off-target effect and is one of the major barriers to developing effective siRNA medicines. Incorporating a single UNA into siRNA molecules can make one of the strands preferentially bind to RISC improving specificity. Additionally, incorporation of UNA modifications can reduce susceptibility of the siRNA to nuclease degradation, improving the efficiency of siRNA-mediated protein suppression.



We own a comprehensive suite of UNA technology patents for therapeutic and reagent use, enabling us to operate freely and to independently pursue nucleic acid therapeutic candidates incorporating this technology. We are also actively pursuing other novel chemistry technologies with the aim of overcoming the development and therapeutic challenges of nucleic acid medicines. Our goal is to expand our nucleic acid technology portfolio and strengthen our ability to develop safer and more effective nucleic acid therapeutic candidates.

INTERNAL DEVELOPMENT PROGRAMS

We are developing mRNA therapeutic candidates to treat rare diseases with unmet medical needs through the following two internal development programs.

1. LUNAR-OTC (ARCT-810)

On February 11, 2019, Arcturus disclosed that the Company will reassume 100% global rights for its flagship asset, clinical development candidate ARCT-810, a mRNA drug to treat OTC Deficiency. The

LUNAR-OTC program addresses orinithine transcarbamylase (OTC) deficiency, a rare, genetic disease caused by mutations in the OTC gene that leads to dysfunctional or deficient OTC levels. OTC deficiency causes the body to accumulate ammonia levels which are neurotoxic and harmful to the liver. Currently, there are only treatments to remove excess ammonia and no disease-modifying treatments of the underlying genetic disorder are available. We use our LUNAR platform to deliver normal OTC mRNA into hepatocytes, where OTC is produced and functions, to produce normal functioning OTC with potentially disease-modifying effects for these patients.

Our LUNAR-OTC approach has the potential to treat the underlying defect that causes the debilitating symptoms that OTC deficiency (dysfunctional or decreased levels of OTC protein), rather than mitigating symptoms by sequestration of ammonia which is at high levels in these patients.

Overview of OTC Deficiency

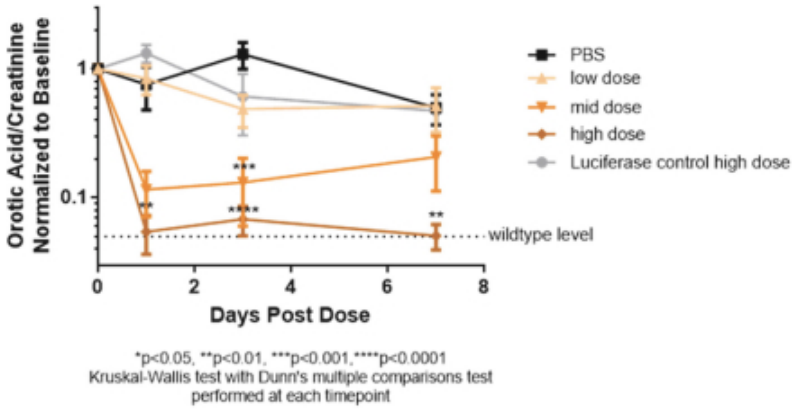
OTC deficiency is caused by mutations in the OTC gene which leads to a non-functional or deficient OTC enzyme. OTCD is the most common urea cycle disorder. Urea cycle disorders are a group of inherited metabolic disorders that make it difficult for afflicted patients to remove toxic waste products as proteins are digested. OTC deficiency is a life-threatening genetic disease. OTC is a critical enzyme in the urea cycle, which takes place in liver cells, and converts ammonia to urea. This conversion does not occur properly in patients with OTC deficiency and ammonia accumulates in their blood, acting as a neurotoxin and liver toxin. This can cause severe symptoms including vomiting, headaches, coma and death. OTC deficiency is an inherited disease that can cause developmental problems, seizures and death in newborn babies. It is an X-linked disorder, so is more common in boys. Patients with less severe symptoms may present later in life, as adults. There is currently no cure for OTC deficiency, apart from liver transplant. However, this treatment comes with significant risk of complications such as organ rejection, and transplant recipients must take immunosuppressant drugs for the rest of their lives. Current standard of care for OTC patients is a low-protein diet and ammonia scavengers to try and prevent patients from accumulating ammonia. These treatments do not address the underlying cause of disease.

The LUNAR-OTC Solution

Our preclinical proof-of-concept studies have shown that LUNAR-delivered human OTC mRNA reduces urinary orotic acid levels in a well-established mouse model of OTC deficiency: *OTC-spf ^{ash}* mice. These mice have elevated urinary orotic acid. Because they have a small amount of residual OTC enzyme activity, they are not hyperammonemic unless challenged with a high protein diet through inhibition of the residual OTC enzyme activity.

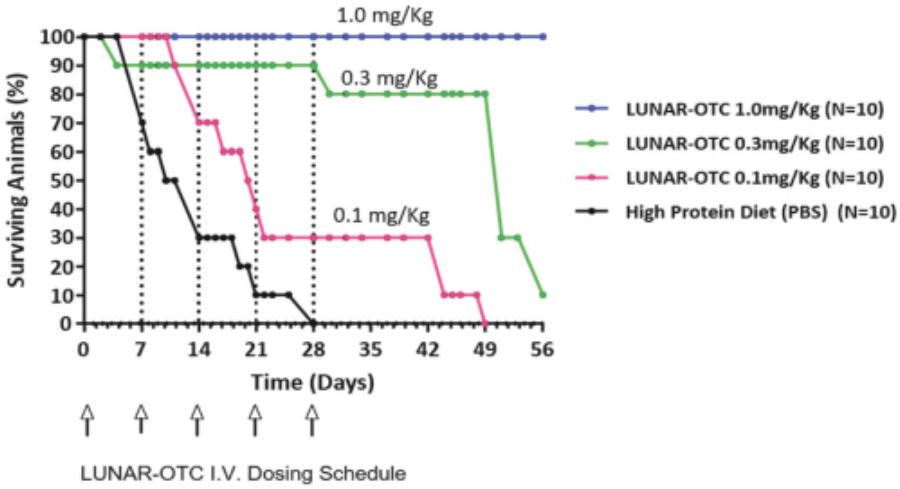
We treated OTC-spf ^{ash} mice, with induced hyperammonemia resulting from a high protein diet, with one intravenous dose of LUNAR-encapsulated human OTC mRNA (candidate mRNA sequences tested at a low, middle, and high dose levels). A LUNAR-encapsulated Luciferase mRNA was included as a control. As shown in the figure below, this single treatment significantly reduced urinary orotic acid levels for at least seven days post-treatment (n=4-6 animals per group).

Urinary orotic acid levels following single administration



Functional effects following repeat dosing of LUNAR-encapsulated human OTC mRNA in *OTC-spf* ^{ash} mice were then determined. *OTC-spf* ^{ash} mice were placed on a high-protein diet to induce hyperammonemia and treated with once weekly intravenous doses of LUNAR-encapsulated human OTC mRNA for 5 weeks at 0.3 and 1.0 mg/kg with a 2-week washout period. As shown in the figure below, animals in the 1.0 mg/kg LUNAR-OTC treatment group were completely protected from lethality (n=10 animals per group).

Survival of OTC-deficient mice on high protein diet following weekly LUNAR-OTC treatment



Our LUNAR-OTC program utilizes our current innovations in protein sequence optimization, mRNA coding region optimization and our proprietary untranslated regions that increase the efficiency of our mRNA therapeutic to translate into protein, the half-life of the OTC protein and also its localization into the mitochondria (a cellular structure) where the OTC protein resides and functions.

2. LUNAR-CF

The LUNAR-CF program addresses cystic fibrosis, a progressive lung disease caused by mutations in the CFTR gene. We use our LUNAR platform to deliver optimized CFTR mRNA into airway epithelial cells. This allows airway cells to produce functional CFTR protein using their native translational machinery and protein trafficking pathways.

This approach has the potential to treat the underlying defect that causes CF (dysfunctional or absent CFTR protein) in *all* such patients, regardless of mutation type. The potential has been recognized by Cystic Fibrosis Foundation Therapeutics, Inc. (CFFT), with whom we have partnered to develop this important therapy.

Overview of CF

According to the National Institutes of Health, CF is the most common lethal genetic disease in the United States. Currently, Arcturus is focusing on Class 1 patients which make up approximately 10% of the United States CF population. More than 30,000 people are living with CF in the United States, 70,000 people worldwide, and approximately 1,000 people are newly-diagnosed each year. There are 2,000 known mutations in the CFTR gene that affect the function of the CFTR protein, an ion channel that controls chloride and sodium movement in-and-out of cells. When this channel is absent or dysfunctional, thick mucus can accumulate in airways and pancreatic ducts, which can cause coughing, chronic bacterial infections, inflammation, tissue scarring, digestive problems and other serious complications. The median lifespan for a person with CF in the United States is 37 years, and the cause of death is usually lung damage.

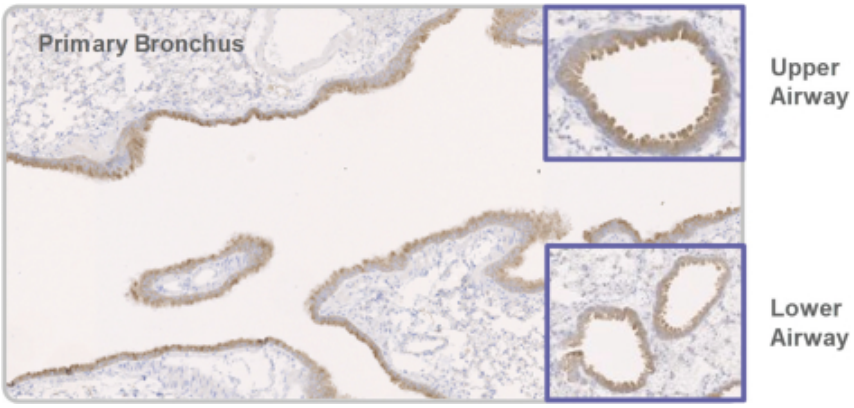
There are currently no FDA-approved drugs that can treat all 2,000 CFTR mutations. The FDA has approved three CFTR modulator therapies (Kalydeco®, Orkambi® and Symdeko®), to treat fewer than 40 CF-causing mutations. These drugs do not treat the underlying genetic cause of CF, but instead assist the mutant CFTR protein to reach the cell membrane and/or increase the functional ion channel activity of the mutant CFTR protein. For patients with other mutations, palliative treatment, including antibiotics and mucolytics, is the primary standard of care. Many of these patients ultimately suffer from decreased lung function and require lung transplant.

Our LUNAR-CF Solution

With the support of CFFT, we are developing an mRNA therapeutic to treat and prevent lung disease in CF patients. Our LUNAR-CF compound comprises normal CFTR mRNA encapsulated by LUNAR delivery technology. This approach is a form of protein replacement therapy as it enables lung cells to produce normal CFTR protein.

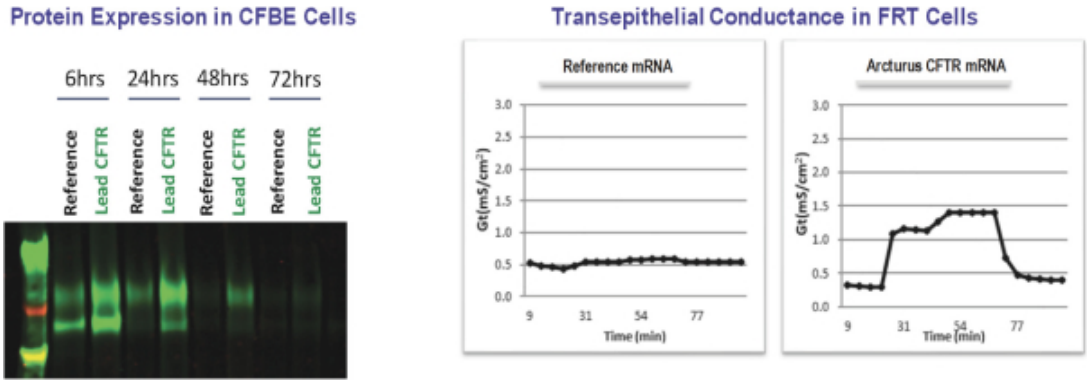
We have completed preclinical proof-of-concept studies, demonstrating that LUNAR efficiently delivers a functional reporter mRNA efficiently into mouse lung epithelial cells *in vivo* (figure below). Six hours following intratracheal delivery of 0.1 mg/kg of the LUNAR-encapsulated reporter green fluorescent protein (GFP) mRNA, GFP protein expression (shown in brown) was observed in mouse lung epithelial cells of the primary bronchus and in bronchioles, important lung structures, located in the upper and lower airways.

In vivo targeting to lung epithelial cells following treatment with LUNAR-reporter mRNA



Through optimization of the CFTR mRNA coding sequence and untranslated regions, we were also able to significantly improve CFTR expression and demonstrate enhanced ion channel activity in an in vitro model system. In cystic fibrosis bronchial epithelial (CFBE) cells transfected with a lead candidate CFTR mRNA sequence, protein expression was significantly increased and the duration of expression was prolonged compared to a reference CFTR mRNA which is the natural coding sequence (figure below, left). When the Arcturus lead candidate CFTR mRNA was transfected into FRT epithelial cells (a cell type used to measure conductance in CF research), a significant increase in transepithelial conductance was observed (figure below, right), indicating that the CFTR protein produced from the mRNA is functional. In this study, the same reference CFTR mRNA was included and minimal functional activity was observed, indicating significant improvement of our proprietary mRNA design compared to the natural sequence.

CFTR protein expression (left) and functional activity (right)



COLLABORATION AGREEMENTS

In addition to our internal development programs, we have a number of development partnerships structured such that we work to discover siRNA or mRNA therapeutic candidates formulated in our LUNAR lipid-mediated delivery system. We are collaborating with Janssen to develop nucleic acid-based candidates for hepatitis B virus (HBV) and potentially other infectious or respiratory diseases, with SGI to enable their self-replicating RNA

technology for animal and human vaccines and therapeutics, with Takeda to develop nucleic acid therapeutic candidates for NASH and other gastrointestinal disorders, with Ultragenyx to develop mRNA therapeutic candidates for rare disease targets and with CureVac to develop mRNA therapeutic and vaccine candidates for various indications. We have also received funding from Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT, to support our LUNAR-CF development program, which is described above.

Janssen Agreement

On October 18, 2017, we entered into a Research Collaboration and License Agreement ("Janssen Agreement") with Janssen to address hepatitis B virus (HBV) with an RNA approach. Under this agreement, we are collaborating with Janssen to create therapeutics intended to treat HBV, and at Janssen's option, other infectious or respiratory disease viruses. Both parties to the Janssen Agreement will carry out their respective research obligations pursuant to agreed upon joint research plans. Janssen may select certain therapeutics in the field for further development by the parties under a joint research plan subject to the terms of the Janssen agreement. Following these joint research efforts, if Janssen selects a development candidate, we will grant to Janssen an exclusive license to the development candidate. As a part of this agreement with Janssen, we will not engage in research independent of this agreement with Janssen for HBV or other disease areas in which Janssen has exercised its option rights to products in the therapeutic area.

The Janssen agreement provides that Janssen will develop the licensed development candidates, obtain certain regulatory approvals and commercialize products containing the development candidates. With respect to rights in infectious and respiratory diseases, Janssen also has an option to have us develop and license therapeutics for infectious and respiratory disease viruses, provided that we may collaborate with third parties and license any rights in the option disease areas to third parties so long as Janssen has not exercised its option rights to products in the therapeutic area. Under the Janssen Agreement, both parties also grant each other certain non-exclusive, royalty-free licenses to conduct the research under the agreement.

Under the Janssen Agreement, Janssen paid us an up-front fee in the mid $5 million to $10 million range. On a development candidate-by-development candidate basis, Janssen will pay us certain development milestone payments of up to $56.5 million for each of the first two products in HBV and in each indication for which Janssen exercises an option. In addition, Janssen will pay us multiple sales milestone payments in the $20 million to $40 million range if specified annual net sales milestones are achieved by Janssen, on a research program-by-research program basis for the first calendar year in which such net sales milestones have been achieved. Janssen will also pay option exercise fees within the $1 to $5 million range, depending on timing of the election to include either of the option fields. In addition, Janssen will pay royalties on annual net sales of licensed products up to mid-single digits range, subject to reduction on a country-by-country and licensed-product-by-licensed-product basis and subject to certain events, such as expiration of program patents.

The Janssen Agreement will terminate when no further royalty payments on any licensed products are payable. Janssen may terminate the Janssen Agreement at any time on a licensed product-by-licensed product and country-by-country basis, or in its entirety, in each case upon 60 days' written notice.

Ultragenyx Agreement

On October 26, 2015, we and Ultragenyx Pharmaceutical Inc. entered into a Research Collaboration and License Agreement, as amended on October 17, 2017 and April 20, 2018 (the "Ultragenyx Agreement"). Ultragenyx initially selected two development targets, including Glycogen Storage Disease III, and the parties agreed to a list of eight additional reserved targets related to rare diseases for which Ultragenyx has the exclusive right to evaluate for collaborative development. During the reserved target exclusivity period Ultragenyx may substitute a reserved target for a selected target, and/or exercise an expansion option by payment to us, whereby a reserved target will be deemed an additional target (and will preclude an additional reserved target in place of the converted reserved target). Further, during the reserved target exclusivity period, Ultragenyx may replace a

reserved target with a proposed new target, subject to certain conditions including whether we have the ability to partner such new target.

The Ultragenyx Agreement additionally provides for limitations on our activities with third parties utilizing LUNAR lipid-mediated delivery technology with respect to a development target for a specified period of time. During the reserved target exclusivity period, we have agreed to exclusivity with respect to any product containing mRNA, including modified mRNA, or UNA oligomer with respect to such reserved target, and will first offer Ultragenyx a right of first negotiation for any other RNA product or a product utilizing the LUNAR delivery technology with respect to such reserved target. The reserved target restrictions terminate upon expiration of the reserved target exclusivity period for each target, which may be extended on a reserved target-by-reserved target basis upon payment of an exclusivity extension fee.

On a reserved target-by-reserved target basis, following the target exclusivity period, Ultragenyx receives an exclusive right of first negotiation to obtain an exclusive license to exploit RNA products with respect to such reserved target. Following the reserved target right of first negotiation period, if the parties have not entered into an agreement during a specified time period, the rights of Ultragenyx terminate and we may grant a license or enter into a third-party arrangement with respect to such reserved target.

Under the Ultragenyx Agreement, Ultragenyx receives a co-exclusive, royalty-free, sublicenseable license under our technology and collaboration technology to conduct collaborative development of development targets, compounds and products. The license remains in effect for a specified option period based upon development plan milestones being achieved with respect to development targets and reserved targets and compounds and products with respect to such development targets and reserved targets. If Ultragenyx exercises its option with respect to a development target and the parties enter into a license agreement, Ultragenyx receives an exclusive (even as to us), royalty bearing, sublicenseable (subject to certain limitations), license under our technology and collaboration technology to exploit compound and products with respect to such development target.

For development and reserved targets that revert to us, we will pay Ultragenyx royalties on net sales of discontinued targets on a country-by-country basis, until the expiration of the last valid claim or the product-specific patents or patent rights licensed by Ultragenyx to us covering such discontinued targets. Such royalties depend on the state of development of the corresponding discontinued target, set in the low-single digits range.

Ultragenyx paid us an upfront fee of $10 million. We are entitled to certain additional payments upon exercise of the Ultragenyx expansion option and/or exclusivity extension (if any), and for costs incurred by us in conducting the activities assigned to us under each collaboration development plan. In addition, on a development target-by-development target basis, Ultragenyx will pay us a one-time milestone payment after the first optimized lead designation for the first product with respect of such development target. For each development target for which Ultragenyx exercises its option, Ultragenyx will pay us a one-time option exercise fee based upon on the total number of development targets for which option exercises have been made by Ultragenyx. The option exercise fee is subject to reduction if a development target does not, for example, utilize RNA delivery technology covered by our patent or a nucleic acid chemistry technology covered by our patent. Ultragenyx will also pay us certain milestone payments in the maximum amount of $49 million per development target with respect to clinical/regulatory development, and a maximum amount of $90 million per development target with respect to commercialization, in each case subject to reduction if such product does not utilize RNA delivered technology covered by our patent. Ultragenyx will pay royalties as a percentage of net sales on a product-by-product and country-by-country basis during the applicable royalty term up to 10%.

The Ultragenyx Agreement provides that each party owns their respective collaboration know-how and collaboration patents and jointly own all joint collaboration know-how and joint collaboration patents, provided that Ultragenyx owns all right, title and interest in and to all collaboration technology that specifically relates to (a) the composition or formulation of a particular compound or product, or (b) any method of using, making or administering a particular compound or product. Further, we will own all improvements to LUNAR lipid-mediated delivery technology and/or UNA oligomer chemistry.

The Ultragenyx Agreement expires on the last-to-expire royalty term for the last product on a development target-by-development target basis, unless earlier terminated. Upon expiration with respect to a particular development target, the licenses to Arcturus know-how granted to Ultragenyx to exploit products with respect to such development target will be fully paid-up, irrevocable and exclusive. On a target-by-target basis, Ultragenyx has the right to terminate for convenience with respect to such target upon 60 days written notice.

Synthetic Genomics Agreement

On October 24, 2017, we entered into a Research and Exclusive License Agreement with Synthetic Genomics, Inc. (the "Synthetic Genomics Agreement"). Under the Synthetic Genomics Agreement, we will carry out research relating to our LUNAR lipid-mediated delivery for specifically agreed research programs in the area of self-replicating mRNA.

We granted Synthetic Genomics an exclusive, worldwide license, under our intellectual property related to LUNAR lipid-mediated delivery, to research, develop, manufacture and commercialize for vaccine and human therapeutic self-amplifying RNA products but expressly excluding diagnosis, prophylaxis and treatment of respiratory disease viruses other than influenza.

Each party retains ownership rights over intellectual property invented jointly by Synthetic Genomics and us (with inventorship determined by U.S. patent law). Under the Synthetic Genomics Agreement, we own all LUNAR product manufacturing process and process technology within any jointly invented program intellectual property (pursuant to an assignment by Synthetic Genomics of its interest in the joint intellectual property). Synthetic Genomics owns all other intellectual property conceived by or for us or jointly invented in performing any research plan that is not expressly assigned to us. Synthetic Genomics will reimburse us for labor costs and pay us a percentage of all cash payments received from any sublicense for a LUNAR product, in the mid 10% to 20% range, less payments made to third parties to obtain the right to practice intellectual property used to develop or necessary to make, use, or sell all or part of licensed LUNAR product (which reduction may not exceed 50% of the aggregate amount paid to us with respect to a specific LUNAR product for any calendar quarter).

If Synthetic Genomics enters into a LUNAR research agreement with a third party, does not develop a LUNAR product with such third party, but subsequently licenses non-LUNAR products to and develops non-LUNAR products with such third party, then Synthetic Genomics will pay us a percentage of the consideration received for such non-LUNAR product in the 5% to 10% range. In the event that Synthetic Genomics desires to sell LUNAR products for which it obtains marketing approval, the Synthetic Genomics Agreement provides that we and Synthetic Genomics will negotiate in good faith with respect to the economics for that specific product opportunity.

Under the Synthetic Genomics Agreement, in order to maintain exclusive rights, Synthetic Genomics must achieve certain specified milestones or pay us annual exclusivity maintenance fees.

Unless earlier terminated, the agreement with Synthetic Genomics continues in full force and effect until the expiration, abandonment, or termination of the last valid claim of a patent within the licensed intellectual property, provided that, the agreement will terminate on the seventh anniversary of the effective date if the agreement becomes non-exclusive and neither Synthetic Genomics nor its sublicensee have achieved specified preclinical milestones within designated time periods. In addition, Synthetic Genomics has the right to terminate the agreement for convenience on ninety (90) days' written notice.

Takeda Agreement

On December 6, 2016, we entered into a Research Agreement with Millennium Pharmaceuticals, Inc., a wholly-owned subsidiary of Takeda (collectively, "Takeda"), as amended December 21, 2017 (the "Takeda

Agreement"). Under the agreement with Takeda, we and Takeda are conducted a research program ("Research Program") to discover siRNA medicine(s) for the treatment of Nonalcoholic Steatohepatitis ("NASH"). We intend to develop siRNA compounds formulated in LUNAR lipid-mediated delivery technology for *in vivo* studies. The Takeda agreement stated that for the initial research term, which has a stated end date of December 20, 2018 ("Research Term"), Takeda received a non-exclusive and worldwide license, with a right to sub-license, our technology for the purpose of conducting the research program under our agreement. We have further agreed, for the period of two years after the Research Term, not to engage in any research or development activities for which LUNAR and UNA oligomers are used against the same NASH target that is the subject of the Research Program. On March 8, 2019, we entered into a Research Collaboration Agreement with Takeda for the purpose of generating, producing or optimizing therapeutic mRNA molecules.

Providence Agreement

On March 16, 2016, we entered into a Research Collaboration and License Agreement with a related party, Providence (the "Providence Agreement"), whose CEO and President is also a shareholder of the Company, to identify and optimize microRNA modulators or mimetics for the treatment of neoplastic diseases. In April 2017, the Providence Agreement was amended to include mRNA for the treatment of neoplastic disease. In July 2018, the Providence Agreement was amended and restated to cover brain neoplasms, breast neoplasms and ovarian neoplasms. Each party is responsible for their own research costs under the agreement, and Providence is responsible for all of the development costs through the completion of Phase 2 clinical trials. We are entitled to share in future product revenue of each product provided we share in the product's post Phase 2 costs. Separately, Providence has agreed to pay a specified rate for the use of our employees.

CureVac Agreements

1. Development and Option Agreement

On January 1, 2018, we entered into a Development and Option Agreement with CureVac AG ("CureVac"), which was amended on May 3, 2018, as restated in the Restated Amendment to the Development and Option Agreement on September 28, 2018 (such agreement, as amended by the restated amendment, the "Development and Option Agreement"). Under the terms of the Development and Option Agreement, CureVac and Arcturus agreed to conduct joint preclinical development programs and we granted CureVac a license on pre-agreed license terms, with respect to targets to be identified during the term of our agreement, to develop and commercialize certain products incorporating our patents and know-how related to delivery systems based on or incorporating lipid-mediated delivery systems (including the LUNAR® platform) (the "Arcturus LMD Technology"), and CureVac patents and know-how related to mRNA technology. Under the terms of the Development and Option Agreement, we granted to CureVac a worldwide, non-exclusive license to use the Arcturus LMD Technology, including the right to grant sublicenses, for the purpose of conducting research and preclinical development activities, subject to certain limitations. In addition, CureVac granted to us a worldwide, non-exclusive license under its mRNA technology, solely to the extent necessary to execute the activities contemplated by the agreement. Subject to certain restrictions, the parties will have an undivided one-half interest in the patents and know-how developed jointly by the parties during the course of the agreement. Pursuant to a May 2018 amendment to the Development and Option Agreement (which as noted above was amended and restated on September 28, 2018), we increased the number of targets available to CureVac under the Development and Option Agreement and agreed upon the license forms to be executed upon selection of the targets by CureVac.

In consideration for the rights granted under the agreement, we received an upfront fee from CureVac. Each development program will be subject to the terms of a work plan under which the parties will use diligent efforts to develop defined products. CureVac may designate certain targets as reserved targets, subject to certain pre-existing restrictions. CureVac has licenses from us for a pre-defined number of targets to use the Arcturus LMD Technology for the development and commercialization of products. To the extent a reserved target is only

available on a nonexclusive basis, CureVac may elect to enter into a non-exclusive license agreement. Such licenses shall be obtained under separate, pre-negotiated forms of license agreements to be entered into by the parties upon identification of the targets. If CureVac identifies a target pursuant to the agreement, it will be required to pay us a fee for an exclusive license—or non-exclusive license, as applicable—based on whether the target is a rare disease target or non-rare disease targets. Pursuant to the form of exclusive license agreement, if CureVac achieves all development and commercialization milestones with respect to the licensed product developed for an identified target, CureVac will be required to pay certain development and regulatory approval milestones depending on whether the target is a rare disease target or non-rare disease target. CureVac will also be required to pay us low single-digit royalties on the net sales of each product falling under a license agreement on a country-by-country and product-by-product basis. Such royalties are subject to reduction for third party payments with respect to licensed products or if there is no valid claim under the licensed patents, but may not fall below a specified percentage if the licensed product during the royalty term is not covered by a licensed patent. Further, if within 24 months after the license agreement effective date, CureVac grants a sublicense to a third party under the license agreement for the development and commercialization of licensed products, then CureVac will pay us a single-digit percentage of the total sublicense income actually received by CureVac to the extent the sublicense income exceeds the fee paid by CureVac under the Development and Option Agreement to identify a target for this license agreement and the milestone payments paid by CureVac under this license agreement. The fees, milestones and royalty payments for a non-exclusive license are fifty percent (50%) of the corresponding payments for an exclusive license.

The Development and Option Agreement has an initial term of eight years unless earlier terminated or extended in accordance with its terms. Within 60 days prior to the expiration of the initial term, CureVac has the option to extend the initial term of the agreement on an annual basis for up to a total of three successive years upon payment to us of an annual non-refundable extension fee. CureVac has the right to terminate the agreement in full or on a program-by-program basis (i) in the event of material breach by us that is not cured within the cure period specified in the agreement, (ii) in the event of a change in control of Arcturus or (iii) without cause upon 60 days' notice to us. We have the right to terminate the agreement upon material breach by CureVac that is not cured within the period specified by the agreement. Upon termination, all licenses granted under the agreement will terminate, but any license agreement entered into pursuant upon the identification of a target will remain in effect.

2. Co-Development and Co-Commercialization Agreement

Concurrently with the Development and Option Agreement, we entered into a Co-Development and Co-Commercialization Agreement with CureVac (the "Co-Development Agreement"). Pursuant to the Co-Development Agreement, the overall collaboration will be managed by a joint steering committee. The parties also have the option to co-develop two mRNA programs for CureVac and one mRNA program for us, including targets for such programs selected from the reserved target list established under the Development and Option Agreement.

Unless earlier terminated, the Co-Development Agreement shall continue in full force and effect on a product-by-product and country-by-country basis until the commercialization party no longer sells product in such country, or with respect to opt-out products, the expiration of the royalty term for such product in accordance with the terms of the agreement. A program initiated pursuant to the Co-Development Agreement may be earlier terminated (i) by CureVac with respect to an Arcturus program and by Arcturus with respect to a CureVac program, for convenience upon 180 days written notice, or (ii) by either party in the event of material breach, if the breaching party has not cured such breach within the applicable cure period. The Co-Development Agreement may be earlier terminated by either party in the event the other party commences legal action against the terminating party challenging the scope of the non-challenging party's patents.

On February 11, 2019, the Company announced the termination of the obligations of CureVac for the preclinical development of ARCT-810, effective 180 days from February 5, 2019 and the re-assumption by the

Company of the worldwide rights thereto. Arcturus will reassume 100% global rights for its flagship asset, clinical development candidate ARCT-810, a messenger RNA (mRNA) drug to treat ornithine transcarbamylase (OTC) deficiency. ARCT-810 was previously subject to a 50/50 collaboration between Arcturus and CureVac AG under the Co-Development Agreement. CureVac elected not to continue its obligations for the preclinical development of ARCT-810 under and pursuant to the terms of the collaboration, which will be effective in the third quarter of 2019.

Pursuant to the terms of the Co-Development Agreement, CureVac is obligated to continue to fund its share of the preclinical expenses for the OTC program into August of 2019.

OTHER MATERIAL AGREEMENTS

The Company has certain other material agreements, including the Protiva Agreement and CFFT Agreement discussed below.

Protiva Agreement

On August 9, 2013, Marina Biotech, Inc. ("Marina") assigned certain intellectual property, including patents, inventions and patent-related information related to UNA oligonucleotide therapeutics to us pursuant to a Patent Assignment and License Agreement, as well as Marina's rights and obligations under a License Agreement with Protiva Biotherapeutics Inc. ("Protiva"), a wholly-owned subsidiary of Arbutus Biopharma Corporation, dated November 28, 2012 (the "Protiva Agreement"). The intellectual property licensed from Marina and Protiva is a significant component of our UNA oligomer chemistry platform. As partial consideration for the assignment from Marina, we granted Marina a royalty-free, fully-paid, irrevocable, worldwide, non-exclusive license to use the inventions, ideas and information embodied in the assigned patents to develop, make, use and sell chemical compounds intended for human and animal therapeutic uses (including certain rights to sublicense in connection with continuing research, development and/or commercialization). We also paid an upfront fee to Marina and agreed to maintain the assigned patents in certain countries.

Under the assigned Protiva Agreement, we granted Protiva a non-exclusive, irrevocable, perpetual, worldwide license with certain rights to sublicense (in connection with continuing research, development and/or commercialization) to exploit our patents, know-how and inventions relating to our technology for purposes of the development of human therapeutics. Protiva will pay us milestone payments with an aggregate value of up to $3.25 million for each Protiva product directed to a specific gene target, upon achievement of certain development milestones with respect to each such product and target. If, instead, Protiva sublicenses the commercialization rights for a Protiva product, then Protiva will pay us a percentage of sublicense revenues paid to Protiva by such sublicensee, depending on the development stage of such Protiva product at the time of sublicense. In addition, Protiva will pay us royalties on net sales of Protiva products during the royalty term depending on the type of product, on a country-by-country basis. For licensed Protiva products, royalties will be paid in the low single digit range on net sales for such product, subject to reduction on net sales for such product in the event there is no patent coverage or generic products are introduced with respect to such Protiva product. A royalty reduction for a Protiva product will also apply if Protiva is required to license third party intellectual property to commercialize such product, subject to a floor for such reductions.

The Protiva Agreement term, for a particular Protiva product in a particular country, will expire (on a country-by-country basis) upon the earlier of (i) the expiration of the royalty term for such Protiva product in such country or (ii) the end of the calendar quarter in which sales in such country of generic products exceed a certain amount compared to sales of Protiva products in such country. The Protiva Agreement will expire in its entirety upon expiration of the last royalty term for any of our patents with respect to which Protiva has a license under the Protiva Agreement, unless earlier terminated. Protiva may terminate the Protiva Agreement for convenience in its entirety, or for a particular country or countries, upon ninety days' prior written notice to Arcturus.

Cystic Fibrosis Foundation Therapeutics Agreement

On May 16, 2017, CFFT awarded us with funds for a development program to identify lead CFTR mRNA sequences and LUNAR formulations, demonstrate tolerability of LUNAR CFTR mRNA, and demonstrate translatability of aerosolized LUNAR (the "CFFT Agreement"). The award of approximately $3.1 million will be received according to a milestone schedule and unused funds will be retained by CFFT. We will use commercially reasonable efforts to conduct the development program, and after the completion of a development program, we will use commercially reasonable efforts to continue to develop the product. The award includes a grant of rights under CFFT know-how to assist us to research, develop, commercialize, make or otherwise exploit a product.

If the award results in a successful product, we will pay CFFT a specified payment amount in installments following commercialization based on a formula that is a single-digit multiple of the total award amount, plus a payment equal to the awarded payments, after aggregate net sales of the product exceed certain thresholds. Further, in the event of a license, sale or other transfer of the product or our development program technology (including a change of control transaction), we will pay CFFT a percentage of such transfer payments actually received by us or our shareholders (subject to a royalty cap).

CFFT has an interruption license right under the CFFT Agreement so that if we fail to use commercially reasonable efforts to develop a product for a certain time period before the first commercial sale of the product, CFFT may, upon written notice of such interruption to us and our failure to effectively deny such interruption or cure such interruption as set forth in the CFFT Agreement, exercise certain rights pursuant to procedures set forth in the CFFT Agreement. CFFT's interruption license rights include, in certain cases, payments from us to CFFT, or the grant of an exclusive (even as to us), worldwide license to CFFT under our development program technology solely to the extent necessary to manufacture, have manufactured, license, use, sell, offer to sell, and support the product in the field of treatment of cystic fibrosis and other pulmonary diseases.

All inventions, data, know-how, information, results, analyses and other intellectual property rights resulting from the development program will be owned by us, and subject to certain exceptions, CFFT assigns and transfers to us all of CFFT's right, title, and interest in and to all inventions and other intellectual property resulting from the development program.

Either party may terminate the CFFT Agreement for cause (e.g., material breach by the other party of its covenants or obligations).

INTELLECTUAL PROPERTY

Our business success depends in part on our ability to obtain and maintain intellectual property protection for our proprietary technologies, inventions and know-how, and on its ability to operate without infringing on the proprietary rights of others. We strive to protect our intellectual property through a combination of patents, trademarks, trade secrets, licensing agreements and confidentiality agreements with employees, advisors, consultants and contractors.

We rely on continuing technological innovation to strengthen our proprietary position in the field of nucleic acid medicines. Therefore, we plan to continue to file patent applications in jurisdictions around the world as we discover and develops novel nucleic acid technology platforms and novel nucleic acid therapeutic candidates. We cannot guarantee that future applications will be issued.

Our Patent Portfolio

As of March 1, 2019, we are the sole owner of 152 patents and pending patent applications including 18 U.S. patents, 24 pending U.S. patent applications, 7 pending international applications under Patent Cooperation

Treaty ("PCT"), 44 foreign patents and 59 pending foreign patent applications. The claims of these patents and pending applications include compositions of matter, methods of use, manufacturing process and drug product formulations. These claims cover the use of our core platform technologies including the use of LUNAR and lipid components to deliver nucleic acid, the use of UNA oligomers for therapeutics and reagents, and the use of LNA oligomers for therapeutics. Claims also cover the composition of matter and use of our therapeutic candidates to treat target diseases including HBV and NASH. Our issued patents are expected to expire between 2028 and 2038, without taking into account any possible patent term extensions.

Our patent portfolio includes the following patents and pending patent applications for LUNAR, UNA and the use of LNA in certain RNA medicines:

- LUNAR—As of March 1, 2019, we own 10 U.S. patents, 8 U.S. pending patent applications, 3 international applications (PTC), and 29 foreign pending patent applications covering the composition of matter and use of our LUNAR technology for nucleic acid delivery and drug delivery.
- UNA, mRNA and LNA—As of March 1, 2019, we own 8 U.S. patents, 16 U.S. pending patent applications, 4 PCT applications, 44 foreign patents and 30 foreign pending patent applications covering methods and uses of LNA, UNA oligomer and mRNA therapeutics, and compositions of UNA oligomers or mRNA to treat specific target diseases.

Our patent portfolio includes a filing covering our LUNAR-OTC program, specifically our engineered OTC protein and our optimized mRNA sequence that encodes for the engineered OTC protein. This patent application will have a term until 2040 without extension.

Patent Terms

The term of individual patents depends on the countries in which they are obtained. The patent term is 20 years from the earliest effective date of filing a non-provisional patent application in most of the countries in which we file.

Under the Drug Price Competition and Patent Term Restoration Act (also known as the Hatch-Waxman Act), U.S. patent holders can apply for a patent term extension to compensate for the patent term lost during the FDA regulatory review process. Patent extension is only available for patents covering FDA-approved drugs. The extension can be up to five years beyond the original expiration date of the patent and cannot extend a patent term for longer than 14 years from the date of product approval. Only one patent extension is granted per approved drug. Similar provisions may be available in foreign jurisdictions including Europe. Arcturus intends to apply for patent term extensions where possible.

We also rely on trade secrets to protect our product candidates. Our commercial success also depends in part on our non-infringement of the patents or proprietary rights of third parties. For a more comprehensive discussion of the risks related to our intellectual property, please see Item 3.D. "Risk Factors"—"Risks Related to Our Intellectual Property."

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions.

Our success depends in part on our ability to:

- preserve trade secrets;
- prevent third parties from infringing upon our proprietary rights; and
- operate our business without infringing the patents and proprietary rights of third parties, both in the United States and internationally.

We also protect our proprietary technology and processes, in part, by confidentiality and invention assignment agreements with our employees, consultants, scientific advisors and other contractors. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our employees, consultants, scientific advisors or other contractors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

COMPETITION

We believe that our scientific knowledge and expertise in nucleic acid-based therapies provide us with competitive advantages over the various companies and other entities that are attempting to develop similar treatments. However, we face competition at the technology platform and therapeutic indication levels from both large and small biopharmaceutical companies, academic institutions, governmental agencies and public and private research institutions. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our success will be based in part upon our ability to identify, develop and manage a portfolio of drugs that are safer and more effective than competing products in the treatment of our targeted patients. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, are more convenient or are less expensive than any products we may develop.

We are aware of several other companies that are working to develop nucleic acid medicines, including gene therapy, gene editing, mRNA, siRNA, and antisense therapeutics. Many of these companies, such as the newly formed Genevant, are also developing nucleic acid delivery platforms which compete with LUNAR technology.

Companies currently developing mRNA therapeutics for prophylactic vaccines, cancer vaccines, or mRNA replacement therapy for rare genetic diseases include Moderna Therapeutics, Translate Bio, Ethris GmbH, CureVac GmbH, BioNTech, and eTheRNA. Translate Bio is developing mRNA replacement therapies for cystic fibrosis and OTC deficiency which are in preclinical or early clinical development, and which directly compete with our LUNAR-OTC and LUNAR-CF programs. Ethris is in preclinical development of ETH-CFTR, a mRNA replacement therapy for cystic fibrosis. A number of companies are developing viral vector or DNA-based approaches to gene delivery for rare liver diseases, including Ultragenyx Pharmaceutical, REGENXBIO, Inc., uniQure, Vivet Therapeutics, LogicBio Therapeutics, Touchlight Genetics Ltd., Generation Bio, and Audentes Therapeutics. Ultragenyx is developing a gene therapy product for OTC deficiency which is in early clinical trials.

Companies developing siRNA therapeutics include Arbutus Biopharma, Arrowhead Pharmaceuticals, Inc, Quark Pharmaceuticals, Inc., Silence Therapeutics plc, Nitto Denko, Dicerna Pharmaceuticals, Inc., and Alnylam Pharmaceuticals, Inc. Antisense therapeutics are also in development by Ionis Pharmaceuticals, Roche Pharma, WAVE Life Sciences, Celgene Corporation, Akcea Therapeutics, Inc., Antisense Therapeutics, Ltd., ProQR, and Sarepta Therapeutics, Inc. Both Ionis Pharmaceuticals and ProQR are developing antisense therapies for cystic fibrosis which compete with our LUNAR-CF program.

In addition, to the companies mentioned above, several companies are developing non-nucleic acid therapies for OTC deficiency which are competitors to our LUNAR-OTC program. For example, Synlogic’s SYNB1020 product is treating urea cycle disorders, including OTC deficiency, by introducing engineered probiotic bacteria to the gut. Promethera’s Heparesc product involves infusion of their HepaStem, liver-derived stem cells into urea

cycle disorder patients to restore normal enzyme function. For cystic fibrosis, many companies are pursuing small molecule therapies designed to increase CFTR function, targeted to different patient populations, which could compete with our LUNAR-CF program. These include Vertex Pharmaceuticals, Proteostasis Therapeutics, Inc., Novartis and Galapagos.

The competitive landscape continues to expand and we expect that additional companies will initiate programs focused on the development of nucleic acid therapeutic products using the approaches described above as well as potentially new approaches that may result in the more rapid development of nucleic acid therapeutics or more effective technologies for nucleic acid drug development or delivery.

MANUFACTURING AND SUPPLY

To date, we have manufactured only limited quantities of drug substance for use in research activities. We have contracted with several third-party contract manufacturing organizations, or CMOs, for the supply of drug substance and finished product to meet our testing needs for preclinical toxicology and clinical testing. We expect to continue to rely on third-party CMOs for the supply of drug substance and drug product for our product candidates for at least the next several years, including to support the launch of our first commercial products.

PRODUCT APPROVAL AND GOVERNMENT REGULATION

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of products such as those we are developing. Any product candidate that we develop must be approved by the FDA before it may be legally marketed in the United States and by the appropriate foreign regulatory agency before it may be legally marketed in foreign countries.

U.S. drug development process

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations. Drugs are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial civil or criminal sanctions. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, debarment, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of nonclinical laboratory tests, animal studies and formulation studies according to good laboratory practices, or GLP, or other applicable regulations;
- submission to the FDA of an application for an IND, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as current good clinical practices, or GCPs, to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA for a new drug;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the drug is produced to assess compliance with the FDA's current good manufacturing practice standards, or cGMP, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- potential FDA audit of the nonclinical and clinical trial sites that generated the data in support of the NDA; and
- FDA review and approval of the NDA.

The lengthy process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations require the expenditure of substantial resources and approvals are inherently uncertain.

Before testing any compounds with potential therapeutic value in humans, the drug candidate enters the preclinical study stage. Preclinical tests, also referred to as nonclinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the drug candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLP. The sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA

as part of the IND. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA imposes a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a drug candidate at any time before or during clinical trials due to safety concerns or non-compliance. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trial.

Clinical trials involve the administration of the drug candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's direct control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety. Each protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted in accordance with the FDA's regulations comprising the good clinical practices requirements. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and provide oversight for the clinical trial until completed.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase 1. The drug is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing may be conducted in patients.
- Phase 2. The drug is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- Phase 3. Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling. Generally, two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of an NDA.

Post-approval clinical trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication.

Annual progress reports detailing the results of the clinical trials must be submitted to the FDA and written IND safety reports must be promptly submitted to the FDA and the investigators for serious and unexpected adverse events or any finding from tests in laboratory animals that suggests a significant risk for human subjects. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor or its data safety monitoring board may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients.

Concurrently with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a

process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

U.S. review and approval processes

The results of product development, nonclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of substantial user fees; a waiver of such fees may be obtained under certain limited circumstances.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The FDA reviews all NDAs submitted to determine if they are substantially complete before it accepts them for filing. If the FDA determines that an NDA is incomplete or is found to be non-navigable, the filing may be refused and must be re-submitted for consideration. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act, or PDUFA, the FDA has 10 months from acceptance of filing in which to complete its initial review of a standard NDA and respond to the applicant, and six months from acceptance of filing for a priority NDA. The FDA does not always meet its PDUFA goal dates. The review process and the PDUFA goal date may be extended by three months or longer if the FDA requests or the NDA sponsor otherwise provides additional information or clarification regarding information already provided in the submission before the PDUFA goal date.

After the NDA submission is accepted for filing, the FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. The FDA may refer applications for novel drug or biological products or drug or biological products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the drug approval process, the FDA also will determine whether a risk evaluation and mitigation strategy, or REMS, is necessary to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS; the FDA will not approve the NDA without a REMS, if required.

Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect the sponsor and one or more clinical sites to assure that the clinical trials were conducted in compliance with IND study requirements. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable it will outline the deficiencies in the submission and often will request additional testing or information.

The NDA review and approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data. The FDA will issue a complete response letter if the agency decides not to approve the NDA. The complete response letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either submit new information, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may require post marketing clinical trials, sometimes referred to as Phase 4 clinical trials, which are designed to further assess a drug safety and effectiveness and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized.

Orphan drug designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making a drug or biological product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan product designation must be requested before submitting an NDA. After the FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan product exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same drug or biological product as defined by the FDA or if our drug candidate is determined to be contained within the competitor’s product for the same indication or disease. If a drug or biological product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity. Orphan drug status has similar but not identical benefits in the European Union.

Expedited development and review programs

The FDA has several regulatory pathways for expedited development and/or review of products intended to treat serious conditions. These pathways are Fast Track designation, Breakthrough Therapy designation, accelerated approval, and priority review. These programs do not change the standards for approval but may expedite the development or approval process. Products may meet the standards for consideration under one or more of these pathways.

The Fast Track program is intended to expedite development or facilitate the process for reviewing new drugs and biological products that meet certain criteria. Specifically, new drugs and biological products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. In addition to more frequent meetings with the FDA to discuss the drug's development plan and ensure collection of appropriate data needed to support drug approval, the FDA will consider for review sections of the NDA on a rolling basis as sections are completed, based on an agreed schedule, and the sponsor pays any required user fees upon submission of the first section of the NDA.

Breakthrough Therapy designation is a process designed to expedite the development and review of drugs that are intended to treat a serious condition and where preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over available therapy on or more clinically significant endpoint(s). A drug that receives Breakthrough Therapy designation from the FDA is eligible for all Fast Track designation features, plus intensive guidance on an efficient drug development program beginning as early as Phase 1 and organizational commitment involving senior managers.

Products may be eligible for accelerated approval. Drug or biological products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means that they may be approved on the basis of adequate and well-controlled clinical trials establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug or biological product receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. Accelerated Approval can be granted with restrictions to the marketing and distribution of the product, and the FDA can withdraw marketing approval if the required post-marketing studies fail to show a clinical benefit or if the sponsor fails to conduct required post-marketing studies.

Any product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biological product designated for priority review in an effort to facilitate the review.

Post-approval requirements

Any drug products for which we or our strategic alliance partners receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with FDA promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet. Failure to comply with FDA requirements can have negative consequences, including adverse publicity, enforcement letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

Manufacturers of our products are required to comply with applicable FDA manufacturing requirements contained in the FDA's cGMP regulations. cGMP regulations require among other things, quality control and

quality assurance as well as the corresponding maintenance of records and documentation. Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA, including withdrawal of the product from the market. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

U.S. patent term restoration and marketing exclusivity

Depending upon the timing, duration and specifics of the FDA approval of the use of our drug candidates, some of our United States patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA plus the time between the submission date of an NDA and the approval of that application. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may intend to apply for restoration of patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA.

Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain applications of other companies seeking to reference another company's NDA. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness. Pediatric exclusivity is another type of regulatory market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act, or FCPA, prohibits certain individuals and entities, including us, from promising, paying, offering to pay, or authorizing the payment of anything of value to any foreign government official, directly or indirectly, to obtain or retain business or an improper advantage. The U.S. Department of Justice and the U.S. Securities and Exchange Commission, or SEC, have increased their enforcement efforts with respect to the FCPA. Violations of the FCPA may result in large civil and criminal penalties and could result in an adverse effect on a company's reputation, operations, and financial condition. A company may also face collateral consequences such as debarment and the loss of export privileges.

Federal and state healthcare laws and regulations

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal healthcare laws and regulations have been applied to restrict certain business practices in the biopharmaceutical industry in recent years. These laws include the following:

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting, or receiving remuneration to induce or in return for purchasing, leasing, ordering, or arranging for the purchase, lease, or order of any healthcare item or service reimbursable under Medicare, Medicaid, or other federally financed healthcare programs. The term "remuneration" has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payment, ownership interests and providing anything at less than its fair market value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution, the exemptions and safe harbors are drawn narrowly, and our practices may not in all cases meet all of the criteria for statutory exemptions or safe harbor protection. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases, or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. The reach of the Anti-Kickback Statute was also broadened by the Patient Protection and Affordable Health Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively the ACA, which, among other things, amended the intent requirement of the federal Anti-Kickback Statute. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act (discussed below) or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

Federal false claims laws, including the federal civil False Claims Act, prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for unapproved, and thus non-reimbursable, uses.

Many states also have statutes or regulations similar to the federal Anti-Kickback Statute and civil False Claims Act, which state laws apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Also, the federal Health Insurance Portability and

Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit, among other things, knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

Because of the breadth of these laws and the narrowness of the federal Anti-Kickback Statute's safe harbors, it is possible that some of our business activities could be subject to challenge under one or more of such laws. Such a challenge could have a material adverse effect on our business, financial condition and results of operations.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, impose on certain types of individuals and entities certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's security standards directly applicable to "business associates"—independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. State laws also govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. In addition, the European Union, or EU, has established its own data security and privacy legal framework, including but not limited to Directive 95/46/EC, or the Data Protection Directive. The Data Protection Directive will be replaced starting in May 2018 with the recently adopted European General Data Protection Regulation, or GDPR, which contains new provisions specifically directed at the processing of health information, higher sanctions and extra-territoriality measures intended to bring non-EU companies under the regulation. We anticipate that over time we may expand our business operations to include additional operations in the EU, including potentially conducting preclinical and clinical trials. With such expansion, we would be subject to increased governmental regulation in the EU countries in which we might operate, including the GDPR.

Further, the federal Physician Payments Sunshine Act, enacted as part of the ACA, requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments or other transfers of value made to physicians and teaching hospitals. Applicable manufacturers and applicable group purchasing organizations must also report annually to CMS ownership and investment interests held by the physicians and their immediate family members.

Other state laws and regulations may also apply, such as those that: require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; and/or state laws that require manufacturers to report information related to transfers of value to healthcare providers or marketing expenditures.

If our operations are found to be in violation of any of the federal and state healthcare laws or regulations described above or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion of products from reimbursement under government programs, disgorgement, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm, diminished profits and future earnings,

and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our product candidates are ultimately sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

In the United States and foreign jurisdictions, there have been a number of legislative and regulatory changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the United States federal and state levels that seek to reduce healthcare costs.

For example, the ACA includes measures to significantly change the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA of greatest importance to the pharmaceutical and biotechnology industry are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, that began in 2011;
- an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts to negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- an extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- an expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the Federal Poverty Level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- an expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- a requirement to annually report drug samples that manufacturers and distributors provide to physicians;
- a licensure framework for follow-on biologic products;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and
- establishment of a Center for Medicare Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Some of the provisions of the ACA have yet to be implemented, and there have been judicial and Congressional challenges to certain aspects of the ACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed two Executive Orders designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive

repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additionally, on January 23, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Congress may enact additional legislation to real or replace certain elements of the ACA. As a result, there is significant uncertainty regarding future healthcare reform and its impact on our operations.

Further, there has been heightened governmental scrutiny in the United States and abroad of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. In the United States, such scrutiny has resulted in several recent Congressional inquiries and proposed federal legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Outside of the United States, particularly in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain coverage and reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed.

Pharmaceutical Coverage, Pricing, and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we or our collaborators receive regulatory approval for commercial sale will depend, in part, on the extent to which third-party payors provide coverage and establish adequate reimbursement levels for such drug products.

In the United States, third-party payors include federal and state healthcare programs, government authorities, private managed care providers, private health insurers and other organizations. Third-party payors are increasingly challenging the price, examining the medical necessity and reviewing the cost-effectiveness of medical drug products and medical services, in addition to questioning their safety and efficacy. Moreover, the process for determining whether a third-party payor will provide coverage for a drug product may be separate from the process for setting the price of a drug product or for establishing the reimbursement rate that such a payor will pay for the drug product. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we

or our collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Europe / rest of world government regulation

In addition to regulations in the United States, we and our strategic alliance partners are subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products.

Whether or not we or our collaborators obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In the European Union, for example, a clinical trial application, or CTA, must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical trial development may proceed.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials are conducted in accordance with GCPs and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval of an investigational drug or biological product under European Union regulatory systems, we or our strategic alliance partners must submit a marketing authorization application. The application in the United States is similar to that required in the European Union, with the exception of, among other things, country-specific document requirements.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCPs and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we or our strategic alliance partners fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Organizational structure

Our wholly-owned subsidiaries are Alcobra, Inc. and Arcturus Therapeutics, Inc. which are both Delaware corporations.

Property, plants and equipment

Our San Diego, California headquarters consists of approximately 24,700 square feet of leased office and laboratory space under a lease that extends through 2025. Our wholly owned subsidiary We believe that our existing facility is adequate for our current needs and that suitable additional space will be available if and when needed.

Legal Proceedings

Previously Disclosed Litigation in Israel and California and California Arbitration

The Company, executive officers Joe Payne (CEO) and Pad Chivukula (COO and CSO) and certain former and current members of the Company's board of directors were party to now terminated lawsuits filed in Israel and California and an arbitration in California. These lawsuits and the arbitration emanated from disputes among certain of these parties in connection with actions taken by former board members to terminate the employment of Mr. Payne and Dr. Chivukula and lawsuits filed by Mr. Payne in response to these terminations.

Mr. Payne and Dr. Chivukula have been reappointed to their roles as CEO (Payne) and COO and CSO (Chivukula) with the Company and the Company entered into an Agreement and Release with its current officers and certain former directors and officers to terminate all of the then ongoing litigation in Israel and the Unites States and the arbitration that arose in connection with the terminations of Mr. Payne and Dr. Chivukula. Accordingly, all of the previously described lawsuits and the arbitration have been dismissed with prejudice.

On February 8, 2019, the Company entered into a share exchange agreement (the "Share Exchange Agreement") between the Company and a special-purpose company, Arcturus Therapeutics Holdings Inc. ("NewCo") in connection with the contemplated redomiciliation of the Company from Israel to Delaware (the "Redomiciliation"). Pursuant to the Share Exchange Agreement, and in order to effectuate the transactions contemplated by the Share Exchange Agreement, on February 11, 2019, the Company filed an application with the Tel Aviv District Court to approve the convening of a general shareholders meeting of the Company for the approval of the Redomiciliation pursuant to Sections 350 and 351 of the Companies Law. The Share Exchange Agreement and the Redomiciliation are subject to shareholder approval as required by the Companies Law, Israeli court approval, effectiveness of filings to be made with the SEC, approval of the listing of shares of NewCo by the NASDAQ Stock Market LLC ("Nasdaq") and the other conditions precedent set forth in the Share Exchange Agreement (the "Conditions Precedent").

In furtherance of the Redomiciliation, the holders of ordinary shares of the Company as of a future record date and the holders of options to purchase ordinary shares of the Company as of the same record date will transfer their ordinary shares of the Company and options to purchase ordinary shares of the Company, respectively, to NewCo and, in exchange thereof, will receive one share of common stock of NewCo for each ordinary share of the Company and one option to purchase one share of common stock of NewCo in exchange for each option to purchase an ordinary share of the Company, respectively.

Concurrently, the Company intends the common stock of NewCo to be listed on NASDAQ. Upon consummation of the transactions contemplated by the Share Exchange Agreement, it is expected that the Company's ordinary shares will be delisted from trading on NASDAQ, and the Company is expected to become a private company (as defined in the Companies Law) wholly-owned by NewCo.

Pursuant to the Share Exchange Agreement, the Company also agreed, subject to the Conditions Precedent, to transfer all of the shares of Arcturus Therapeutics Inc. ("Arcturus Sub"), a wholly-owned subsidiary of the Company, to NewCo through a reduction of the Company's equity and the distribution of a dividend-in-kind, such that Arcturus Sub and the Company shall each become a wholly-owned and direct subsidiary of NewCo.

MANAGEMENT'S DISCUSSION AND ANALYSIS AND RESULTS OF OPERATIONS

Overview

We are an emerging RNA medicines company focused on the development and commercialization of therapeutics directed towards rare, infectious, fibrotic, and respiratory diseases with significant unmet medical need. The genetic medicines industry is constantly struggling to identify non-viral delivery solutions for large RNA molecules to different cell types. Arcturus' LUNAR® Delivery technology is lipid mediated—and non-viral. LUNAR is versatile, compatible with various types of RNA—and has been shown to deliver large RNA to different cell types including Liver hepatocytes, Liver stellate cells, Muscle cells (myocytes), and Lung cells (including bronchial epithelial cells).

Our activities since inception have consisted principally of performing research and development activities, general and administrative activities and raising capital to fund those efforts. Our activities are subject to significant risks and uncertainties, including failing to secure additional funding before we achieve sustainable revenues and profit from operations. As of December 31, 2018, we had an accumulated deficit of $44.9 million.

Liquidity and Capital Resources

Going Concern and Management's Plans

The Company's products that are being developed have not generated significant revenue. As a result, the Company has suffered recurring losses and requires significant cash resources to execute its business plans. These losses are expected to continue for an extended period of time. Based on our planned operations, we do not expect that our current cash and cash equivalents balances will be sufficient to fund our operations for at least 12 months after the date the consolidated financial statements are filed without raising additional capital through equity or debt financing. These conditions raise substantial doubt about our ability to continue as a going concern for a period of one year from the date of the issuance of our 2018 consolidated financial statements. The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of asset amounts or the classification of liabilities that might be necessary should the Company be unable to continue as a going concern within one year after the date the financial statements are issued.

Historically, our major sources of cash have comprised proceeds from collaboration partners, various public and private offerings of our ordinary shares, option and warrant exercises, and interest income. From inception through December 2018, the Company raised approximately $131.5 million in gross proceeds from various public and private offerings of our ordinary shares, debt issuances, collaboration agreements, and the merger with Alcobra.

As of December 31, 2018, the Company had approximately $36.8 million in cash, restricted cash and cash equivalents. Management's plans to mitigate an expected shortfall of capital, to support future operations, include raising additional funds. The actual amount of cash that it will need to operate is subject to many factors.

The Company also recognizes it will need to raise additional capital in order to continue to execute its business plan in the future. There is no assurance that additional financing will be available when needed or that management will be able to obtain financing on terms acceptable to the Company or whether the Company will become profitable and generate positive operating cash flow. If the Company is unable to raise sufficient additional funds, it will have to scale back its operations.

Overview

Since our inception, we have funded our operations principally with proceeds from the sale of capital stock, convertible notes and revenues earned through collaborative agreements. In November 2017, we obtained

$36.4 million in cash and short-term investments from our merger with Alcobra Ltd. At December 31, 2018, we had $36.7 million in unrestricted cash and cash equivalents.

On October 12, 2018, the Company entered into a Loan and Security Agreement with Western Alliance Bank whereby the Company received gross proceeds of $10.0 million under a long-term debt agreement (the "Loan"). The Loan has a maturity date of October 1, 2022 and carries interest at the U.S. prime rate plus 1.25%. The loan has an interest-only period of 19 months, which could be extended by an additional 6 months if certain conditions are met, followed by an amortization period of 30 months, or 24 months if the interest-only period is extended. Upon maturity or prepayment, the Company will be required to pay a 3% fee, or a 2% fee if the U.S. Food and Drug Administration accepts certain Investigational New Drug applications prior to maturity. The Company paid a loan origination fee of $128,000 which was recorded as a debt discount and will be accreted over the term of the loan. In addition, the Company is required to pay a fee of $350,000 upon certain change of control events. The Loan is collateralized by all of the assets of the Company, excluding intellectual property, which is subject to a negative pledge. In addition, the Company is required to maintain at least 50% of its deposit and investment accounts, or $20 million, whichever is lower, with the Western Alliance Bank.

The Loan includes financial covenants which include the Company's (1) nomination of a clinical candidate by December 31, 2018, which the Company is in compliance with, and (2) submission of a clinical candidate for Investigational New Drug application ("IND"), made to the U.S. Food and Drug Administration by December 31, 2019 and have it approved by January 31, 2020, provided that, if the Company has received net cash proceeds from sale, on or after October 12, 2018, of the Company's equity securities in an amount of not less than $15,000,000, then the IND submission date shall extended to May 31, 2020 and the approval date shall be extended to June 30, 2020.

On October 15, 2018, the Company entered into a Sales Agreement (the "Sales Agreement") with Leerink Partners LLC ("Leerink"), pursuant to which it may sell from time to time, at its option, up to an aggregate of $30.0 million of the Company's ordinary shares through Leerink, as sales agent. The Company is required to pay Leerink compensation in cash equal to 3.0% of gross proceeds for the ordinary shares sold through the Sales Agreement and the Company has agreed to reimburse Leerink for certain fees and expenses. Under the Sales Agreement, Leerink may sell ordinary shares by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 of the Securities Act of 1933, as amended, and the rules and regulations thereunder, including, without limitation, sales made directly on or through NASDAQ, on or through any other existing trading market for the ordinary shares or to or through a market maker. If expressly authorized by the Company, Leerink may also sell ordinary shares in negotiated transactions.

If we are unable to maintain sufficient financial resources, our business, financial condition and results of operations will be materially and adversely affected. There can be no assurance that the Company will be able to obtain the needed financing on acceptable terms or at all. Additionally, equity or debt financings may have a dilutive effect on the holdings of the Company's existing shareholders. Our future capital requirements are difficult to forecast and will depend on many factors.

We expect to continue to incur additional losses for the foreseeable future, and we will need to raise additional debt or equity financing or enter into additional partnerships to fund development. The ability of our Company to transition to profitability is dependent on identifying and developing successful mRNA drug candidates. In the near future, if we are not able to achieve planned milestones, incur costs in excess of our forecasts, or do not meet covenant requirements of our debt, we will need to reduce discretionary spending, discontinue the development of some or all of our products, which will delay part of our development programs, all of which will have a material adverse effect on our ability to achieve our intended business objectives. There can be no assurances that additional financing will be secured or, if secured, will be on favorable terms. These conditions raise substantial doubt about the business, results of operations, financial condition and/or our ability to fund scheduled obligations on a timely basis or at all. The accompanying financial statements have been prepared assuming that we will continue as a going concern, which contemplates the realization of assets and the

settlement of liabilities and commitments in the normal course of business. The consolidated financial statements do not reflect any adjustments related to the recoverability and classification of assets or the amounts and classification of liabilities that might be necessary if we are unable to continue as a going concern.

The following table shows a summary of our cash flows for the year ended December 31, 2018 and 2017 (in thousands):

(Dollars in thousands)	Year Ended December 31, 2018	2017
Cash provided by (used in):		
Operating activities	$ (20,760)	$ (460)
Investing activities	22,134	10,355
Financing activities	10,204	6,998
Net increase in cash and restricted cash	$ 11,578	$ 16,893

Operating Activities

Our primary use of cash is to fund operating expenses, which consist mainly of research and development expenditures and general and administrative expenditures. We have incurred significant expenses which have been partially offset by cash collected through our collaboration agreements and acquired through our recent merger. Cash collections under the collaboration agreements can vary from year to year depending on the terms of agreement and work performed. These changes on cash flows primarily relate to the timing of cash receipts for upfront payments, reimbursable expenses and achievement of milestones under these collaborative agreements.

Net cash used in operating activities was $20.8 million on a net loss of $21.8 million for the year ended December 31, 2018, compared to net cash used of $0.5 million on a net loss of $10.9 million for the year ended December 31, 2017. Adjustments for non-cash charges which includes share-based compensation and depreciation and amortization were $2.2 million and $3.1 million for the year ended December 31, 2018 and 2017, respectively. Changes in working capital resulted in adjustments to operating net cash outflows of $1.2 million for the year ended December 31, 2018, and net cash inflows of $7.4 million for the year December 31, 2017.

Investing Activities

Net cash provided by investing activities of $22.1 million for the year ended December 31, 2018 reflected proceeds from the maturities of our short-term investments of $30.2 million, offset by purchases of short-term investments of $6.6 million, and cash used to purchase property and equipment of $1.5 million. Net cash provided by investing activities of $10.4 million for the year ended December 31, 2017 reflected proceeds from the maturities of our short-term investments of $10.6 million and negligible proceeds from the sale of equipment, offset by cash used to purchase property and equipment of $0.3 million.

Financing Activities

Net cash provided by financing activities of $10.2 million for the year ended December 31, 2018 consisted of net proceeds from the exercise of stock options of $0.3 million and net proceeds from the long-term debt of $9.9 million. Net cash provided by financing activities of $7.0 million for the year ended December 31, 2017 consisted of proceeds from issuance of convertible promissory notes of $5.7 million, net proceeds from exercise of stock options and warrants of $0.9 million and net cash received in the issuance of shares for the net assets of Alcobra Ltd. of $0.5 million.

Funding Requirements

We anticipate that we will continue to generate annual net losses for the foreseeable future, and we expect the losses to increase as we continue the development of, and seek regulatory approvals for, our product candidates, and begin commercialization of our products. As a result, we will require additional capital to fund our operations in order to support our long-term plans. The Company intends to seek additional capital through equity and/or debt financings, collaborative or other funding arrangements with partners or through other sources of financing. Should we seek additional financing from outside sources, we may not be able to raise such financing on terms acceptable to us or at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to scale back or discontinue the advancement of product candidates, reduce headcount, liquidate our assets, file for bankruptcy, reorganize, merge with another entity, or cease operations.

Our future funding requirements are difficult to forecast and will depend on many factors, including the following:

- the achievement of milestones under our strategic alliance agreements;
- the terms and timing of any other strategic alliance, licensing and other arrangements that we may establish;
- the initiation, progress, timing and completion of preclinical studies and clinical trials for our product candidates;
- the number and characteristics of product candidates that we pursue;
- the outcome, timing and cost of regulatory approvals;
- delays that may be caused by changing regulatory requirements;
- the cost and timing of hiring new employees to support our continued growth;
- the costs involved in filing and prosecuting patent applications and enforcing and defending patent claims;
- the costs and timing of procuring clinical and commercial supplies of our product candidates;
- the costs and timing of establishing sales, marketing and distribution capabilities;
- the costs associated with legal proceedings;
- the costs associated with potential litigation related to collaboration agreements; and
- the extent to which we acquire or invest in businesses, products or technologies.

Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the consolidated financial statements included in this annual report. Our historical results of operations and the year-to-year comparisons of our results of operations that follow are not necessarily indicative of future results. As noted in the 2017 Annual Report, from an accounting perspective, the merger which closed on November 15, 2017 has been reflected in our financial statements as a recapitalization, whereby Arcturus Therapeutics, Inc. was the deemed accounting acquirer. Accordingly, our results of operations described below reflect Arcturus Therapeutics, Inc.’s results, not Alcobra Ltd.’s results, for all periods presented.

Revenues

We enter into arrangements with pharmaceutical and biotechnology partners that may contain upfront payments, license fees for research and development arrangements, research and development funding, milestone

payments, option exercise and exclusivity fees and royalties on future sales. The following table summarizes our total revenues for the periods indicated (in thousands):

(Dollars in thousands)	Year Ended December 31, 2018	2017	2017 to 2018 $ change	% change
Collaboration revenue	$ 15,753	$ 12,998	$ 2,755	21.2%

Collaboration revenue increased by $2.8 million during the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase in revenue was due to a new collaboration agreement that was signed during the first quarter of 2018 with CureVac that resulted in $4.4 million in revenue, an increase in revenue of $1.2 million related to the collaboration agreement with Ultragenyx as upfront payment amortization increased due to a change to the amortization period as well as revenue recognized from a payment received from Ultragenyx that extended the exclusivity period of reserved targets for one year. Lastly, a $1.4 million increase in revenue with Synthetic Genomics, Inc. related to a contract signed during the fourth quarter of 2017. These increases were primarily offset by decreased revenue of $3.6 million associated with Janssen as a result of the previous agreement being completed during the third quarter of 2017. Furthermore, a decrease in revenue of $0.6 million resulted from lower revenue recognition for research and development funding from two other collaboration partners.

On February 11, 2019, we announced the termination of the obligations of CureVac for preclinical development, effective 180 days from February 5, 2019 and the re-assumption by us of the worldwide rights thereto. We will reassume 100% global rights of our flagship asset and clinical development candidate, a messenger RNA (mRNA) drug to treat ornithine transcarbamylase (OTC) deficiency.

Operating Expenses

Our operating expenses consist of research and development and general and administrative expenses.

(Dollars in thousands)	Year Ended December 31, 2018	2017	2017 to 2018 $ change	% change
Operating expenses:				
Research and development, net	$ 16,982	$ 15,918	$ 1,064	6.7%
General and administrative	20,582	7,572	$13,010	*
Total	$ 37,564	$ 23,490	$14,074	59.9%

* Greater than 100%

Research and Development Expenses, net

Our research and development expenses consist primarily of payments for salaries and related personnel expenses, third-party clinical consultants, and laboratory supplies related to conducting research and development activities in conjunction with collaborative agreements and our internal research and development activities.

The increase of $1.1 million in research and development expenses for the year ended December 31, 2018 as compared to the year ended December 31, 2017 was due to an increase of $0.6 million in share-based compensation expense, an increase of $1.0 million in salaries related to new hires and increases in general facility costs of $0.7 million. The increase in research and development expenses were offset by lower expense of $0.9 million in research supplies and contract manufacturing costs primarily from the completion of our initial collaboration agreement with Janssen as well as the $0.3 million increase in grant funding from the Cystic Fibrosis Foundation.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related benefits for our executive, administrative and accounting functions and professional service fees for legal and accounting services as well as other general and administrative expenses.

The increase in general and administrative expenses of $13.0 million for year ended December 31, 2018 as compared to the year ended December 31, 2017 was partly due to proxy and related costs of $7.3 million, which included legal fees of $4.4 million, $1.2 million increase in insurance cost from a director "tail" insurance policy that was purchased pursuant to the terms of the Agreement and Release, additional professional fees of $0.9 million, and other personnel costs of $0.8 million. The remaining increase of $5.7 million was due primarily the increase of $2.5 million of salaries and related expenses for new hires, $2.4 million of professional fees, $0.8 million of public company related expenses, $0.8 million in general facility and office costs and $0.6 million of insurance costs, offset by lower expense in share-based compensation of $1.6 million. The offset in share-based compensation is primarily related to a one-time modification of a restricted ordinary share agreement in 2017. Without the effect of this one-time adjustment, share-based compensation expenses for the year ended December 31, 2018 would have been relatively the same amount as it was during the year ended December 31, 2017.

Finance income (expense), net

(Dollars in thousands)	Year Ended December 31, 2018	2017	2017 to 2018 $ change	2017 to 2018 % change
Finance income (expense), net:				
Interest income	$ 514	$ 89	$ 425	*
Interest expense	(186)	(150)	$ (36)	24.0%
Debt conversion expense	—	(348)	$ 348	-100.0%
Total	$ 328	$ (409)	$ 737	*

* Greater than 100%

Interest income is generated on cash and cash equivalents and our short-term investments. For the year ended December 31, 2018, the increase in interest income over the year ended December 31, 2017 resulted from increased balances including cash and investments obtained in conjunction with our merger.

Interest expense during 2018 was incurred primarily in conjunction with the long-term debt with Western Alliance Bank. Interest expense during 2017 was incurred from our convertible notes which were converted to Ordinary Shares in conjunction with our merger.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in conformity with accounting principles generally accepted in the United States, or U.S. GAAP. As such, we make certain estimates, judgements and assumptions that we believe are reasonable, based upon information available to us. These judgements involve making estimates about the effect of matters that are inherently uncertain and may significantly impact our results of operations and financial condition. We describe our significant accounting policies more fully in Note 2 to our consolidated financial statements for the year ended December 31, 2018. In the following paragraphs, we describe the specific risks associated with these critical accounting policies and we caution that future events may not reflect exactly as one may expect, and that best estimates may require adjustment.

The following are our significant accounting policies which we believe are the most critical to aid in fully understanding and evaluating our reported financial results.

Revenue Recognition

We recognize revenue when each of the following four criteria is met: (i) persuasive evidence of an arrangement exists; (ii) products are delivered or as services are rendered; (iii) the sales price is fixed or determinable; and (iv) collectability is reasonably assured.

Multiple-element arrangements may include (i) grants of licenses, or options to obtain licenses, to intellectual property, (ii) research and development services, (iii) participation on joint research or joint development committees, or (iv) manufacturing or supply services. The payments we may receive under these arrangements typically include one or more of the following: non-refundable upfront license fees, option exercise fees, funding of research or development efforts, amounts due upon the achievement of specified objectives, or royalties on future product sales.

Multiple-element arrangements require the separability of deliverables included in an arrangement into different units of accounting and the allocation of arrangement consideration to the units of accounting. The evaluation of multiple-element arrangements requires management to make judgments about (i) the identification of deliverables, (ii) whether such deliverables are separable from the other aspects of the contractual relationship, (iii) the estimated selling price of each deliverable, and (iv) the expected period of performance for each deliverable.

To determine the units of accounting under a multiple-element arrangement, management evaluates certain separation criteria, including whether the deliverables have stand-alone value, based on the relevant facts and circumstances for each arrangement. Management then estimates the selling price for each unit of accounting and allocates the arrangement consideration to each unit using the relative selling price method. The allocated consideration for each unit of accounting is recognized based on the method most appropriate for that unit of account and in accordance with the revenue recognition criteria detailed above.

If there are deliverables in an arrangement that are not separable from other aspects of the contractual relationship, they are treated as a combined unit of accounting, with the allocated revenue for the combined unit recognized in a manner consistent with the revenue recognition applicable to the final deliverable in the combined unit. Payments received prior to satisfying the relevant revenue recognition criteria are recorded as deferred revenue in the accompanying balance sheets and recognized as revenue when the related revenue recognition criteria are met.

Most of our collaboration agreements provide for non-refundable milestone payments. We recognize revenue that is contingent upon the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. A milestone is considered substantive when the consideration payable to us for such milestone (i) is consistent with our performance necessary to achieve the milestone or the increase in value to the collaboration resulting from our performance, (ii) relates solely to our past performance and (iii) is reasonable relative to all of the other deliverables and payments within the arrangement. In making this assessment, we consider all facts and circumstances relevant to the arrangement, including factors such as the scientific, regulatory, commercial and other risks that must be overcome to achieve the milestone, the level of effort and investment required to achieve the milestone and whether any portion of the milestone consideration is related to future performance or deliverables.

We periodically review the estimated performance periods under the collaboration agreements, which provide for non-refundable upfront payments and fees. We adjusted the periods over which revenue was recognized when appropriate to reflect changes in assumptions relating to the estimated performance periods. In the first quarter of 2019, we will adopt new accounting guidance that will change future patterns of revenue recognition.

We record revenues related to the reimbursement of costs incurred under the collaboration agreements where we act as a principal, control the research or development activities and bear credit risk. Under our

collaboration agreements, we are reimbursed for associated out-of-pocket costs and for a certain amount of our full-time equivalent, or FTE, costs based on an agreed-upon FTE rate. The gross amount of these pass-through reimbursed costs is reported as revenue in the accompanying consolidated statements of operations and comprehensive loss, while the actual expenses for which we are reimbursed are reflected as research and development costs.

Emerging Growth Company

The Company will no longer qualify as an emerging growth company after December 31, 2018. Subject to certain conditions set forth in the JOBS Act, as an "emerging growth company" through December 31, 2018, we elected to rely on other exemptions, including without limitation, (i) providing an auditor's attestation report on our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act and (ii) complying with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis).

Under the JOBS Act, an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of new or revised accounting standards that have different transition dates for public and private companies until those standards would otherwise apply to private companies. We have elected to use this extended transition period specifically for *Revenue from Contracts with Customers* (Topic 606). As a result of this election, our timeline to comply with this standard will in many cases be delayed as compared to other public companies that were not eligible to take advantage of this election or did not make this election. Therefore, our consolidated financial statements may not be comparable to those of companies that complied with the public company effective dates for this standard.

Off-balance sheet arrangements

None.

DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors as of March 1, 2019:

Name	Age	Position(s)
Executive Officers		
Joseph E. Payne	47	President and Chief Executive Officer and Director
Andrew Sassine(6)	54	Chief Financial Officer and Director
Padmanabh Chivukula	40	Chief Scientific Officer and Chief Operating Officer
Non-Employee Directors		
Dr. Peter Farrell(1)(2)(3)(4)(5)	76	Director and Chairman of the Board
James Barlow(1)(2)(3)(4)(5)	60	Director
Dr. Magda Marquet(1)(2)(3)(4)(5)	60	Director

(1) Indicates independent director under Nasdaq rules.
(2) Member of the Audit Committee.
(3) Member of the Compensation Committee.
(4) Member of the Executive Committee.
(5) Member of the Nominating and Corporate Governance Committee.
(6) Andrew Sassine served as a Director of the Board during the year ended December 31, 2018. Mr. Sassine also served as the Interim Chief Financial Officer from August 24, 2018 to December 31, 2018. Effective January 1, 2019, Mr. Sassine became our Chief Financial Officer on a full-time basis.

Joseph E. Payne is the President and Chief Executive Officer of Arcturus Therapeutics Ltd. He serves on Arcturus'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. Joseph's background includes over 20 years of successful drug discovery experience at Merck Research Labs, DuPont Pharmaceuticals, Bristol-Myers Squibb, Kalypsys, and Nitto 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.

Dr. Padmanabh Chivukula is the Chief Scientific Officer and Chief Operating Officer of Arcturus Therapeutics. Dr. Chivukula has an exceptional and technically solid foundation in nanoparticle technology. Prior to Arcturus, from 2008 until February 2013, Dr. Chivukula was employed by Nitto, 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.

Dr. Peter 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. 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. Peter 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. Peter 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.

Andrew Sassine serves on the Board of Directors of Nasdaq listed ICAD Inc. and Nasdaq listed Gemphire Therapeutics, Inc. (GEMP). ICAD Inc. is a leading provider of advanced image analysis, workflow solutions and radiation therapy for early detection and treatment of cancer. Gemphire Therapeutics, Inc. is a clinical-stage biopharmaceutical company focused on delivering and commercializing therapies for the treatment of cardiovascular disease and Non-alcoholic steatohepatitis. He also is Chairman of the Board of privately held ComHear Inc., a digital audio software and device company. Mr. Sassine previously served on the board of Acorn Energy, Inc., CNS Response, Inc. and FluoroPharma Medical, Inc., (FMPI). 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. Prior to joining Fidelity, he served as a vice president in the Acquisition Finance Group at Fleet National Bank. 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.

James Barlow is a member of the Board of Directors of NAHS Holding, Inc., an Employee Stock Ownership Plan company, whose affiliates provide post-acute 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).

Dr. Magda Marquet is an experienced and highly-regarded leader in the life sciences industry with a very successful track record in entrepreneurship. She has a true passion for creating a winning corporate culture of innovation and expertise in strategic growth and corporate governance. She co-founded Althea Technologies in 1998, and led the company as co-CEO for ten years. Althea Technologies was successfully acquired by

Ajinomoto in 2013. As of today, Dr. Marquet remains as Chairman of the Board of the new entity Aji Bio-Pharma, a leading global contract development and manufacturing organization. She is also the co-Founder of AltheaDx, a commercial stage precision medicine company with the world's leading pharmacogenomics test for anxiety and depression. She is co-Founder and co-CEO of ALMA Life Sciences, an early stage investment firm focusing on the creation and growth of innovative healthcare companies with an overall focus on prevention. In addition, Dr. Marquet serves as a Board member of Senté, Matrisys Bioscience, Arcturus Therapeutics (ARCT), HUYA and Independa. She is an advisor to Mesa Verde Venture Partners and City National Bank. Dr. Marquet plays a pivotal role in developing San Diego's entrepreneurial ecosystem where she serves on several non-profit boards, including BIOCOM, CONNECT, EDC and Moores Cancer Center at UC San Diego. Dr. Marquet has over three decades of experience in the biotechnology industry in the United States and Europe. Prior to starting Althea Technologies, Dr. Marquet held management positions at Vical, Amylin Pharmaceuticals, Protein Polymer Technologies, Syntro Corporation and Transgene. She holds a Ph.D. in Biochemical Engineering from INSA/University of Toulouse, France. Dr. Marquet has received numerous awards throughout her career including the 2005 Regional Ernst & Young Entrepreneur of the Year award in the Life Sciences category, the Athena Pinnacle award, the Most Admired CEO award from the San Diego Business Journal, and the Director of the Year award (Corporate Governance) from the Corporate Directors Forum. Under her leadership, Althea Technologies received several Best Companies to Work For awards. Dr. Marquet is the first woman to be inducted into the CONNECT Entrepreneur Hall of Fame.

Board of Directors and Executives—Term and Contracts

We have entered into written employment agreements with all of our executive officers. Each of these agreements contains provisions regarding non-competition, confidentiality of information and ownership of inventions. The non-competition provision applies for a period that is generally 12 months following termination of employment. The employment agreements also include severance for certain key employees subject to our compensation policy. The enforceability of covenants not to compete in Israel and the United States is subject to limitations. In addition, we are required to provide notice prior to terminating the employment of our executive officers, other than in the case of a termination for cause.

Other than with respect to our directors that are also executive officers, we do not have written agreements with any director providing for benefits upon the termination of his employment with our company.

Board of Directors—Israeli Law

Under the Companies Law, our Board of Directors is vested with the power to set corporate policy and oversee our business. Our Board of Directors may exercise all powers and may take all actions that are not specifically granted to our shareholders or to management. Our Board of Directors serves as the primary corporate body responsible for risk management for our company, including cybersecurity risks, and periodically consults with the management of our company to obtain updates concerning, and internally discusses, the most material risks currently facing our company, and how those risks are being mitigated. Our executive officers are responsible for our day-to-day management and have individual responsibilities established by our Board of Directors. Our principal executive officer is appointed by, and serves at the discretion of, our Board of Directors, subject to the employment agreement that we have entered into with him. All other executive officers are appointed by our principal executive officer, and are subject to the terms of any applicable employment agreements that we may enter into with them.

Under our amended and restated articles of association, our Board of Directors must consist of at least five and not more than eleven directors. Our Board of Directors currently consists of five directors. We have only one class of directors. In accordance with the Companies Law and our amended and restated articles of association, our Board of Directors is required to appoint one of its members to serve as Chairman of the Board of Directors. Our Board of Directors has appointed Dr. Farrell to serve as Chairman of the Board of Directors.

Each of our directors is elected at an annual or extraordinary general meeting of shareholders. The vote required for the election of each director is a majority of the voting power represented at the meeting and voting on the election proposal.

External Directors—Exemption

In June 2016, we elected to be governed by an exemption under the Companies Law regulations that exempts us from appointing external directors and from complying with the Companies Law requirements related to the composition of the audit committee and compensation committee of our Board of Directors. Our eligibility for that exemption is conditioned upon: (i) the continued listing of our Ordinary Shares on the Nasdaq Stock Market (or one of a few select other non-Israeli stock exchanges); (ii) there not being a controlling shareholder (generally understood to be a 25% or greater shareholder) of our company under the Companies Law; and (iii) our compliance with the Nasdaq Listing Rules requirements as to the composition of (a) our Board of Directors—which requires that we maintain a majority of independent directors (as defined under the Nasdaq Listing Rules) on our Board of Directors (subject to applicable cure periods under the Nasdaq Listing Rules) and (b) the audit and compensation committees of our Board of Directors, which rules require that such committees consist solely of independent directors (at least three and two members, respectively). At the time that it was determined to exempt our company from the external director requirement, our board affirmatively determined that we meet the conditions for exemption from the external director requirement.

Board Nominations and Removal

Our directors are each elected at an annual or extraordinary general meeting of our shareholders and serve until the next annual general meeting. Such election is subject to the nomination, and recommendation for the Board of Directors' nomination, by a majority of independent directors. Directors may nevertheless be removed prior to the end of their term by the majority of our shareholders at a general meeting of our shareholders or upon the occurrence of certain events, all in accordance with the Companies Law and our amended and restated articles of association.

In addition, our amended and restated articles of association allow our Board of Directors to appoint directors, to fill vacancies on our Board of Directors, for a term of office equal to the remaining period of the term of office of the directors whose offices have been vacated or appoint new additions to Board of Directors up to the maximum number of directors.

Under the Companies Law, following the publication of a notice convening the general meeting of shareholders by the Company, nominations for directors may be made by any shareholder holding at least one percent (1%) of our outstanding voting power. However, any such shareholder may make such a nomination only if a written notice of such shareholder's intent to make such nomination has been given to our Board of Directors. Any such notice must include certain information which under the Companies Law requires to be provided to our shareholders, the consent of the proposed director nominee(s) to serve as our director(s) if elected and a declaration signed by the nominee(s) declaring that there is no limitation under the Companies Law preventing their election and that all of the information that is required under the Companies Law to be provided to us in connection with such election has been provided.

Board Member Qualifications

In addition to its role in making director nominations, under the Companies Law, our Board of Directors must determine the minimum number of directors who are required to have accounting and financial expertise. Under applicable regulations, a director with accounting and financial expertise is a director who, by reason of his or her education, professional experience and skill, has a high level of proficiency in and understanding of business accounting matters and financial statements, sufficient to be able to thoroughly comprehend the financial statements of the Company and initiate debate regarding the manner in which financial

information is presented. In determining the number of directors required to have such expertise, our Board of Directors must consider, among other things, the type and size of our company and the scope and complexity of its operations. Our Board of Directors has determined that our company requires one director with such expertise. Mr. James Barlow has such accounting and financial expertise.

Audit Committee

Israeli Law Requirements

Under the Companies Law, the board of directors of a public company must appoint an audit committee.

Our Audit Committee assists our Board of Directors in fulfilling its legal and fiduciary obligations in matters involving our accounting, auditing, financial reporting, internal control and legal compliance functions by pre-approving the services performed by our independent accountants and reviewing their reports regarding our accounting practices and systems of internal control over financial reporting. Our Audit Committee also oversees the audit efforts of our independent accountants and takes those actions that it deems necessary to satisfy itself that the accountants are independent of management.

Under the Companies Law, our Audit Committee is responsible for:

- determining whether there are deficiencies in the business management practices of our Company, and making recommendations to our Board of Directors to improve such practices;
- determining whether to approve certain related party transactions (including transactions in which an office holder has a personal interest and whether such transaction is extraordinary or material under the Companies Law) (see Item 16G.—"Corporate Governance—Approval of Related Party Transactions under Israeli Law" of our Annual Report on Form 20-F for the fiscal year ended December 31, 2017);
- examining our internal controls and internal auditor's performance, including whether the internal auditor has sufficient resources and tools to dispose of its responsibilities;
- examining the scope of our auditor's work and compensation and submitting a recommendation with respect thereto to our Board of Directors or shareholders, depending on which of them is considering the appointment of our auditor;
- establishing procedures for the handling of employees' complaints as to the management of our business and the protection to be provided to such employees;
- determining whether certain acts of an office holder not in accordance with his or her fiduciary duty owed to the Company are extraordinary or material and to approve such acts and certain related party transactions (including transactions in which an office holder has a personal interest) and whether such transaction is extraordinary or material under the Companies Law (see Item 16G.—"Corporate Governance—Approval of Related Party Transactions under Israeli Law" of our Annual Report on Form 20-F for the fiscal year ended December 31, 2017);
- deciding whether to approve and to establish the approval process (including by tender or other competitive proceedings) for certain transactions with a controlling shareholder or in which a controlling shareholder has a personal interest; and
- determining the process of approval of transactions that are not negligible, including determining the types of transactions that will be subject to the approval of our Audit Committee.

Nasdaq Requirements

Under the Nasdaq Listing Rules, we are required to maintain an audit committee consisting of at least three independent directors, all of whom are financially literate and one of whom has accounting or related financial

management expertise. Under the Nasdaq Listing Rules, the audit committee is responsible for, among other things: the oversight of our independent registered public accounting firm; the receipt, retention, and treatment of complaints received by our company regarding accounting, internal accounting controls, or auditing matters; and **t**he confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters.

Our Audit Committee consists of Mr. Barlow, who serves as the chairperson of the Audit Committee, Mr. Farrell and Dr. Marquet, all of whom are independent under the listing standards of the Nasdaq Listing Rules. The existing Board of Directors has determined that Mr. Barlow is an audit committee financial expert as defined by the SEC rules and has the requisite financial sophistication as defined by the Nasdaq Listing Rules. All of the members of our Audit Committee meet the requirements for financial literacy under the applicable Nasdaq Listing Rules. Each member of the Audit Committee is required to be (and each of the foregoing members of our Audit Committee actually is) "independent" as such term is defined in Rule 10A-3(b)(1) under the Exchange Act.

Charter

Our Board of Directors has adopted an audit committee charter setting forth the responsibilities of our Audit Committee consistent with the rules of the SEC and the Nasdaq Listing Rules, as well as the requirements for such committee under the Companies Law. The audit committee charter is posted on our website.

Compensation Committee and Compensation Policy

Compensation Committee—Israeli Law Requirements

Under the Companies Law, the board of directors of a public company must appoint a compensation committee, which must be responsible for (i) approving, and proposing for approval by the board of directors and shareholders, a compensation policy, (ii) proposing necessary revisions to the compensation policy and examining its implementation, (iii) determining whether to approve transactions with respect to the terms of office and employment of office holders, and (iv) determining, in accordance with the compensation policy, whether to exempt an engagement with an unaffiliated nominee for the position of principal executive officer from requiring shareholders' approval. The term "office holder," as defined in the Companies Law, includes directors, executive officers and any manager directly subordinate to the chief executive officer. Under the regulations promulgated under the Companies Law, certain exemptions and reliefs with respect to the compensation committee are granted to companies such as ours whose securities are traded outside of Israel.

Compensation Policy Requirements

The Companies Law provides that a compensation policy must serve as the basis for the decisions concerning the financial terms of employment or engagement of the office holders, including exculpation, insurance, indemnification or any monetary payment or obligation of payment in respect of employment or engagement. The compensation policy must be approved (or reapproved) not less frequently than every three years, and relate to certain factors, including advancement of the company's objective, business plan and its long-term strategy and creation of appropriate incentives for office holders. It must also consider, among other things, the company's risk management, size and nature of its operations. The compensation policy must furthermore consider the following additional factors:

- the knowledge, skills, expertise and accomplishments of the relevant office holder;
- the office holder's roles and responsibilities and prior compensation agreements with him or her;
- the relationship between the terms offered and the average compensation of the other employees of the company, including those employed through manpower companies;
- the impact of disparities in salary upon work relationships in the company;

- the possibility of reducing variable compensation at the discretion of the board of directors or the possibility of setting a limit on the exercise value of non-cash variable equity-based compensation; and
- as to severance compensation, the period of service of the office holder, the terms of his or her compensation during such service period, the company's performance during that period of service, the person's contributions towards the company's achievement of its goals and the maximization of its profits and the circumstances under which the person is leaving the company.

The compensation policy must also include the following principles:

- the link between variable compensation and long-term performance and measurable criteria;
- the relationship between variable and fixed compensation, and the ceiling for the value of variable compensation;
- the conditions under which a director or executive would be required to repay compensation paid to him or her if it was later shown that the data upon which such compensation was based was inaccurate and was required to be restated in the company's financial statements;
- the minimum holding or vesting period for variable, equity-based compensation; and
- maximum limits for severance compensation.

The compensation policy must be approved by the board of directors, after considering the recommendations of the compensation committee. The compensation policy must also be approved by a majority of the company's shareholders, provided that (i) such majority includes at least a majority of the shareholders who are not controlling shareholders and who do not have a personal interest in the matter, present and voting (abstentions are disregarded), or (ii) the non-controlling shareholders and shareholders who do not have a personal interest in the matter who were present and voted against the policy hold two percent or less of the outstanding voting power of the company. Other than for a newly public company, for which the regulations provide for a five-year period, for all other public companies, the compensation policy must be approved by the board of directors and the shareholders every three years. If the compensation policy is not approved by the shareholders, the compensation committee and the board of directors may nonetheless approve the policy, following further discussion of the matter and for specified reasons.

Our amended and restated Compensation policy, that meets the above requirements, was recently restated and approved by our shareholders in August 2018.

Israeli Law Office Holder Compensation Approvals

Under the Companies Law, the terms of office and employment of office holders require the approval of the compensation committee and the board of directors. The terms of office and employment of directors and the Chief Executive Officer must also be approved by shareholders (excluding several exemptions). Changes to existing terms of office and employment of office holders (other than directors) can be made with the approval of the compensation committee only, if the committee determines that the change is not substantially different from the existing terms.

Under certain circumstances, the compensation committee and the board of directors may approve an arrangement that deviates from the compensation policy, provided that such arrangement is approved by the special majority of the company's shareholders mentioned above. Such shareholder approval will also be required with respect to determining the terms of office and employment of a director or the principal executive officer during the transition period until a company adopts a compensation policy (or during any period between the three-year anniversary (or in the case of a newly public company, the initial five-year anniversary) of the last adoption of a compensation policy and the actual adoption of an updated compensation policy). Notwithstanding the foregoing, a company may be exempted from receiving shareholder approval with respect to the terms of

office and employment of a candidate for principal executive officer if such candidate meets certain independence criteria, the terms are in line with the compensation policy and the compensation committee has determined for specified reasons that shareholder approval would prevent the engagement.

Compensation Committee—Nasdaq Requirements

Under the Nasdaq Listing Rules, we are required to maintain a compensation committee, consisting entirely of independent directors, which is authorized to determine the compensation of our executive officers (or, the determination of that compensation of our executive officers must be made solely by the independent members of the board of directors).

Our Compensation Committee consists of Dr. Marquet, who serves as the chairperson of the committee, Mr. Farrell and Mr. Barlow, all of whom are independent under the listing standards of the Nasdaq Listing Rules.

Compensation Committee—Charter

Our Board of Directors has adopted a compensation committee charter setting forth the responsibilities of our Compensation Committee consistent with the Nasdaq Listing Rules and the requirements under the Companies Law, as described above. The compensation committee charter requires that our Compensation Committee be comprised of at least three members. The compensation committee charter is posted on our website.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee consists of Mr. Farrell, who serves as the chairperson of the committee, and Mr. Barlow and Dr. Marquet, each of whom are independent under the listing standards of the Nasdaq Listing Rules. No committee member may be an employee of the Company and each member must be free from any relationship that would interfere with the exercise of his or her independent judgment, as determined by the Board of Directors, in accordance with the applicable independence requirements under the Nasdaq Listing Rules. The members of the committee and the committee chairperson are appointed by the Board of Directors. To the extent that the Board of Directors is then required to include external directors under the Companies Law, at least one such external director will serve on the Nominating and Corporate Governance Committee.

The purpose of the Nominating and Corporate Governance Committee is to: (i) oversee all aspects of the Company's corporate governance functions on behalf of the Board of Directors; (ii) make recommendations to the Board of Directors regarding corporate governance issues; (iii) identify, review and evaluate candidates to serve as directors of the Company and review and evaluate incumbent directors; (iv) serve as a focal point for communication between such candidates, non-committee directors and the Company's management; (v) recommend for nomination by the Board of Directors and election by the shareholders candidates to serve on the Board of Directors; and (vi) make other recommendations to the Board of Directors regarding affairs relating to the directors of the Company, including director compensation (subject to approval by the compensation committee of the Board of Directors to the extent required under Israeli law).

The Nominating and Corporate Governance Committee has the following primary responsibilities:

- *Director Nominations*—The committee has the responsibility of identifying, reviewing and evaluating candidates to serve on the Company's Board of Directors, including consideration of any potential conflicts of interest as well as applicable independence and experience requirements. The committee will also have the primary responsibility for reviewing, evaluating and considering the recommendation for nomination of incumbent directors for re-election to the Board, as well as monitoring the size of the Board of Directors. The committee will also recommend to the Board of

Directors for selection candidates to the Board of Directors. The committee will also have the power and authority to consider recommendations for Board of Directors nominees and proposals submitted by the Company's shareholders and to establish any policies, requirements, criteria and procedures, including policies and procedures to facilitate shareholder communications with the Board of Directors, to recommend to the Board of Directors appropriate action on any such proposal or recommendation and to make any disclosures required by applicable law in the course of exercising its authority.

- *Management and Board Assessment*—The committee will periodically review, discuss and assess the performance of management and the Board of Directors, including Board of Directors committees, seeking input from senior management, the full Board of Directors and others. The assessment will include evaluation of the Board of Director's contribution as a whole and effectiveness in serving the best interests of the Company and its shareholders, specific areas in which the Board of Directors and/or management believe contributions could be improved, and overall Board of Directors composition and makeup, including the reelection of current board members. The factors to be considered will include whether the directors, both individually and collectively, can and do provide the integrity, experience, judgment, commitment, skills and expertise appropriate for the Company. The committee will also consider and assess the independence of directors, including whether a majority of the Board of Directors continue to be independent from management in both fact and appearance, as well as within the meaning prescribed by the Nasdaq Listing Rules. The results of these reviews will be provided to the Board of Directors for further discussion as appropriate.
- *Board Committee Nominations*—The committee, after due consideration of the interests, independence and experience of the individual directors and the independence and experience requirements of the Nasdaq Listing Rules, the rules and regulations of the SEC and applicable law, will recommend to the entire Board of Directors annually the chairmanship and membership of each committee. The committee will conduct an annual self-evaluation.
- *Continuing Education*—The committee will consider instituting a plan or program for the continuing education of directors.
- *Corporate Governance Principles*—The committee has the authority to develop a set of corporate governance principles to be applicable to the Company, may periodically review and assess these principles and their application, and may recommend any changes deemed appropriate to the Board of Directors for its consideration. Further, the committee will periodically review Company policy statements to determine their adherence to the Company's code of conduct.
- *Procedures for Information Dissemination*—The committee will oversee and review the processes and procedures used by the Company to provide information to the Board of Directors and its committees. The committee should consider, among other factors, the reporting channels through which the Board of Directors and its committees receive information and the level of access to outside advisors where necessary or appropriate, as well as the procedures for providing accurate, relevant and appropriately detailed information to the Board of Directors and its committees on a timely basis.
- *Director Compensation*—The committee will periodically review the compensation paid to non-employee directors for their service on the Board of Directors and its committees and recommend any changes considered appropriate to the compensation committee, which in turn can recommend to the full Board of Directors for its approval.
- *Management Succession*—The committee will periodically review with the Chief Executive Officer the plans for succession to the offices of the Company's executive officers and make recommendations to the Board of Directors with respect to the selection of appropriate individuals to succeed to these positions.
- *Self-Assessment*—The committee will review, discuss and assess its own performance at least annually. The committee will also periodically review and assess the adequacy of the committee charter,

including the committee's role and responsibilities as outlined in the committee charter, and will recommend any proposed changes to the Board of Directors for its consideration.

- *Reporting to the Board*—The committee, through the committee chairperson, will report all material activities of the committee to the Board of Directors from time to time or whenever so requested by the Board of Directors.

Nominating and Corporate Governance Committee—Nasdaq Requirements

We maintain a Nominating and Corporate Governance Committee, consisting entirely of independent directors, which is authorized to oversee our corporate governance functions on behalf of the Board of Directors and identify, review and evaluate candidates to serve as directors of the company (including coordinating communication between candidates, non-committee directors and the company's management, making nomination recommendations and other recommendations regarding director-related affairs).

Our Nominating and Corporate Governance Committee consists of Mr. Farrell, who serves as the chairperson of the committee, and Mr. Barlow and Dr. Marquet, who are all independent under the listing standards of the Nasdaq Listing Rules.

Nominating and Corporate Governance Committee—Charter

Our Board of Directors has adopted a Nominating and Corporate Governance Committee Charter setting forth the responsibilities of the Nominating and Corporate Governance Committee consistent with the Nasdaq Listing Rules and the requirements under the Companies Law, as described above. The Nominating and Corporate Governance Committee Charter requires that our Nominating and Corporate Governance Committee be comprised of at least two members. The Nominating and Corporate Governance Committee Charter is posted on our website. The Nominating and Corporate Governance Committee holds at least one regular meeting per year and additional meetings, as the committee deems appropriate.

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2018, which consist of all individuals who served as our principal executive officer during 2018 and our two most highly compensated executive officers other that the principal executive officer who were serving as executive officers at the end of the last completed fiscal year, are:

- Joseph E. Payne, our President, Chief Executive Officer, and Director of the Board;
- Andrew Sassine, our Interim Chief Financial Officer from August 24, 2018 to December 31, 2018. Effective January 1, 2019, Mr. Sassine was appointed the Company's Chief Financial Officer;
- Padmanabh Chivukula, our Chief Science Officer and Chief Operating Officer;
- Mark Herbert, Interim President from February 2, 2018 to May 26, 2018.

Name and Principal Position	Year	Salary ($)(1)	Bonus ($)(1)	Option Awards ($)(2)	Share Awards ($)	Nonequity Incentive Plan Compensation ($)	Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)(3)	Total ($)
Joseph E. Payne	2018	$425,000	$372,532	$636,888	$ —	$ —	$ —	$ 1,252,624(4)	$2,687,044
President and Chief Executive Officer, Director of the Board	2017	$384,000	$ 40,810	$ —	$ —	$ —	$ —	$ 23,955	$ 448,765
Padmanabh Chivukula	2018	$350,000	$ 83,233	$424,592	$ —	$ —	$ —	$ 515,080(5)	$1,372,905
Chief Scientific Officer and Chief Operating Officer	2017	$335,000	$ 40,810	$ —	$ —	$ —	$ —	$ 72	$ 375,882
Andrew Sassine Interim Chief Financial Officer(6)	2018	$120,000	$ —	$126,340(7)	$ —	$ —	$ —	$ —	$ 246,340
Mark Herbert Interim President(8)	2018	$307,200	$ —	$ —	$ —	$ —	$ —	$ 153,600(9)	$ 460,800

(1) Figures represent Salary and Bonus amounts as of fiscal year-end regardless of increases in Salary during the fiscal year and regardless of whether part or all of such amounts were paid in subsequent fiscal year(s). Bonuses are awarded pursuant to a bonus program. Salary and Bonus amounts owed to Mr. Payne are subject to approval of the shareholders under the Israeli law.

(2) Represents the grant date fair value of options awarded in accordance with accounting guidance for equity-based compensation. All the following option share numbers and exercise prices per share give effect to the 1-for-7 reverse split implemented in connection with the merger in November 2017.

(3) Includes the social benefits paid by us on behalf of the employees, including convalescence pay, contributions made by the company to an insurance policy or a pension fund, work disability insurance, life insurance, medical insurance, and payments for social security.

(4) Includes $14,625 of fees for services as a member of the board of directors in 2018 and $1,237,999 of certain expenses incurred by the Company in connection with the previously disclosed dispute between management and former Company directors.

(5) Represents severance amount given to Dr. Chivukula and certain expenses incurred by the Company in connection with the previously disclosed dispute between management and former Company directors.

(6) Excludes fees and share based payments made to Mr. Sassine for his services as a member of the Board of Directors, which is presented in the Directors' Compensation table below.

(7) Mr. Sassine served as the Company's Interim Chief Financial Officer from August 24, 2018 through December 31, 2018 and received options to purchase 20,000 of the Company's ordinary shares ("Interim CFO Grant"). On January 1, 2019, Mr. Sassine was appointed the Company's Chief Financial Officer and was granted options to purchase 100,000 shares of the Company's ordinary shares. The unvested portion of the Interim CFO Grant was cancelled on January 1, 2019.
(8) Mr. Herbert served as our interim President from February 2018 until his resignation on May 29, 2018. Salary figure represents Mr. Herbert's salary upon resignation.
(9) Represents severance payments made to Mr. Herbert.

Base Salary

The base salaries of our named executive officers, as applicable, is generally determined and approved by our board of directors, based on the recommendation of the compensation committee.

Mr. Payne's annual base salary for 2018 and 2017 was $425,000 and $384,000. In February 2019, our Board approved that Mr. Payne shall receive options to purchase 60,000 shares of the Company's Ordinary Shares and his annual base salary will change to $450,000, both of which are subject to approval of the shareholders under the Israeli law.

Dr. Chivukula's annual base salary for 2018 and 2017 was $350,000 and $335,000. In February 2019, Dr. Chivukula received options to purchase 40,000 shares of the Company's common stock and his annual base salary was changed to $370,000.

Mr. Sassine's annual base salary for 2018 was $120,000 as the Interim Chief Financial Officer. In January 2019, our Board approved options for Mr. Sassine to purchase 100,000 shares of the Company's ordinary shares as well as an increase in Mr. Sassine's annual base salary to $375,000. Both are subject to approval of the shareholders under the Israeli law.

Annual Bonus

Under the Company's 2018 Omnibus Equity Incentive Plan, as approved by shareholders under the Companies Law, the compensation terms for Mr. Payne and Dr. Chivukula with respect to an annual bonus are summarized below:

Payne Annual Bonus:

An annual bonus of up to 60% of Mr. Payne's Annual Base Salary. For fiscal year 2018, the "Annual Base Salary" shall be calculated based on a base salary of $384,000 through July 4, 2018 and a base salary of $425,000 from July 5 to the end of the bonus period. The bonus shall be subject to the achievement of certain criteria for each 12 month-period (or such shorter or longer period determined by the Compensation Committee and the Board), as determined by the Compensation Committee and Board, in accordance with the Company's Amended and Restated Compensation Policy as previously approved by shareholders in accordance with the Companies Law (the "Company Compensation Policy"). The Board and the Compensation Committee may determine that Mr. Payne shall be entitled to certain portion(s) of the bonus upon partial achievement of the criteria and that the bonus shall be conditioned upon the achievement of a minimum threshold of the criteria. The Board and the Compensation Committee may further determine that in the event that Mr. Payne's employment terminates prior to the end of a full 12-month period, he shall be entitled to the relative portion of the bonus, based on the actual employment term during the 12-month period and the Board's assessment of actual performance at the end of the bonus performance period.

Chivukula Annual Bonus:

An annual bonus of up to 40% of the Annual Base Salary. The bonus shall be subject to the achievement of certain criteria for each 12 month-period (or such shorter or longer period determined by the Compensation

Committee and the Board), as shall be determined by the Compensation Committee and the Board, in accordance with the Company's Compensation Policy. The Board and the Compensation Committee may determine that Dr. Chivukula be entitled to certain portion(s) of the bonus upon partial achievement of the criteria and that the bonus shall be conditioned upon the achievement of a minimum threshold of the criteria. The Board and the Compensation Committee may further determine that in the event that Dr. Chivukula employment terminates prior to the end of a full 12-month period, he shall be entitled to the relative portion of the bonus, based on the actual employment term during the 12-month period and the Board's assessment of actual performance at the end of the bonus performance period.

In 2018, Mr. Payne received a 2018 annual bonus equal to 60% of the compensation payable from January 1, 2018 to year end, and Dr. Chivukula received a 2018 annual bonus equal to 40% of the compensation in fact paid from May 29, 2018 to year end.

Under the Company's Compensation Policy, the Company is permitted to grant an annual cash bonus to the CEO and the Company's chief officers and those performing management functions directly subordinate to the Company's Chief Executive Officer ("Senior Staff") as part of their compensation package, according to measurable and qualitative criteria, subject to the parameters set forth in the Company's Compensation Policy, with the specific parameters for the Senior Staff determined by the CEO and the parameters for the CEO determined by the Chairman of the Board and the Company's Compensation Committee.

Equity-Based Awards

Our equity-based incentive awards are designed to align our interests with those of our employees and consultants, including our named executive officers. Our board of directors or our compensation committee approves equity grants. Vesting of equity awards is generally tied to continuous service with us and serves as an additional retention measure. Our executives may be awarded an initial new hire grant upon commencement of service and may receive additional grants, as the board of directors or compensation committee determines appropriate, in order to incentivize and/or reward such executives.

We have traditionally granted stock options to our named executive officers under our equity incentive plans, the terms of which are described below under "—Equity Benefit Plans."

Potential Payments and Benefits upon Termination or Change in Control

Mr. Payne, Dr. Chivukula and Mr. Sassine may be entitled to receive severance grants upon termination or upon a change in control of the Company under the compensation arrangements approved by shareholders at the Company's 2018 Annual and Extraordinary General Meeting of Shareholders (the "AGM"), as summarized below:

Joseph Payne

For termination without cause or resignation for good reason unrelated to a change in control of the Company and conditioned on execution of a general waiver and release of claims, Mr. Payne shall be entitled to receive: (i) severance pay in the form of continuation of payment installments of Mr. Payne's final base salary for twelve (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 payment) for up to eighteen (18) months following his termination of employment.

For termination without cause or resignation for good reason in connection with a change in control of the Company and conditioned on execution of a general waiver and release, Mr. Payne shall be entitled to receive: (i) a lump sum severance payment equal to 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 shall also be entitled to payment of certain health insurance coverage premiums (COBRA payment) for eighteen (18) months following termination. In addition, Mr. Payne's unvested option award and any other unvested time-based vesting equity awards then held by him shall accelerate and become immediately vested and exercisable, if applicable, and no longer subject to repurchase, if applicable, upon such termination and shall remain exercisable, if applicable, following Mr. Payne's termination as set forth in the applicable equity award.

Dr. Padmanabh Chivukula

For termination without cause or resignation for good reason unrelated to a change in control of the Company and conditioned on execution of a general waiver and release of claims, Dr. Chivukula shall be entitled to receive: (i) severance pay in the form of continuation of payment installments of Dr. Chivukula's final base salary for twelve (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 payment) for up to eighteen (18) months following his termination of employment.

For termination without cause or resignation for good reason in connection with a change in control of the Company and conditioned on execution of a general waiver and release, Dr. Chivukula shall be entitled to receive: (i) a lump sum severance payment equal to 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 shall also be entitled to payment of certain health insurance coverage premiums (COBRA payment) for 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 shall accelerate and become immediately vested and exercisable, if applicable, and no longer subject to repurchase, if applicable, upon such termination and shall remain exercisable, if applicable, following Dr. Chivukula's termination as set forth in the applicable equity award.

Andrew Sassine

Mr. Sassine received options to purchase 32,500 Ordinary Shares under the 2018 Plan for his service as a director of the Company. From the options to purchase 32,500 Ordinary Shares, options to purchase 20,000 Ordinary Shares will be considered as an "Inducement Award", options to purchase 10,000 Ordinary Shares will be considered as an "Annual Ongoing Equity Compensation" and options to purchase 2,500 Ordinary Shares will be made as a one-time grant to award Mr. Sassine for service on the Board from May 29, 2018 through the Meeting. Mr. Sassine's Inducement Award options and Annual Ongoing Equity Compensation options are subject to full acceleration in the event of a change in control.

Additional details of the compensation terms approved by Company shareholders at the AGM may be found in the Company's Notice and Proxy Statement dated July 27, 2018 for the Annual and Extraordinary General Meeting of Shareholders held on Friday, August 24, 2018 and exhibits thereto, filed as Exhibits 99.1, 99.2, 99.3 and 99.4 to the Company's Report of Foreign Private Issuer on Form 6-K filed on July 27, 2018.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth certain information regarding all outstanding equity awards held by our named executive officers as of December 31, 2018. None of the outstanding equity awards shown in the table below have been exercised or forfeited as of December 31, 2018.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Mr. Payne	0	120,000	$ 8.00	8/23/2028
Dr. Chivukula	0	80,000	$ 8.00	8/23/2028
Mr. Sassine	12,917	39,583	$ 8.00	8/23/2028

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 non-qualified compensation plans sponsored by us.

Equity Benefit Plans

In August 2018, the Company adopted the 2018 Omnibus Equity Incentive Plan ("2018 Plan"). Under the 2018 Plan, the Company is authorized to issue up to a maximum of 1,100,000 ordinary shares pursuant to the exercise of incentive share options or other awards provided for therein.

Non-Employee Director Compensation

The following table and related footnotes show the compensation paid during the year ended December 31, 2018 to our non-employee directors, other than Mr. Payne and Mr. Sassine whose 2018 Board compensation is set forth above under "Executive Compensation" above.

Name	Fees Earned or Paid in Cash ($)	Option Awards ($)	All Other Compensation ($)	Total ($)
Dr. Peter Farrell(1)	18,887	164,776	—	183,663
Mr. James Barlow(1)	13,736	164,776	—	178,512
Dr. Magda Marquet(1)	12,019	164,776	—	176,795
Mr. Andrew Sassine(1)(4)	8,585	164,776		173,361
Dr. Stuart Collinson(2)	18,000	—	—	18,000
Mr. Daniel Geffken(2)	27,708	—	—	27,708
Dr. David Shapiro(2)	23,958	—	—	23,958
Mr. Craig Willett(2)	35,167	—	50,000(3)	85,167

(1) These individuals started serving on the Company's Board of Directors on May 27, 2018.
(2) These individuals served on the Company's Board of Directors until May 27, 2018.
(3) Represents a one time payment to Mr. Willett for his services provided in 2017 in connection with the reverse merger.
(4) Excludes compensation made to Mr. Sassine for his services as the Interim Chief Financial Officer in 2018, which is included in the Named Executive Compensation table above.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Major shareholders

The following table sets forth information with respect to the beneficial ownership of our Ordinary Shares as of March 1, 2019 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 Ordinary Shares is determined in accordance with the rules of the SEC and generally includes any Ordinary Shares 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 March 1, 2019, 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 10,761,523 Ordinary Shares outstanding as of March 1, 2019 (excluding the shares repurchased by the Company as set forth herein).

The following table sets forth information regarding the beneficial ownership by each person or entity known to beneficially own more than 5% of our Ordinary Shares as of March 1, 2019, or a different date, if so provided in the table below or footnotes thereof.

According to our transfer agent, as of March 1, 2019, there were 82 record holders of our Ordinary Shares, one of which (Cede & Co., the nominee of the Depositary Trust Company) is a U.S. holder holding 39% of our outstanding Ordinary Shares. The number of record holders in the United States is not representative of the number of beneficial holders nor is it representative of where such beneficial holders are resident since many of these Ordinary Shares are held by beneficially brokers or other nominees on behalf of their clients. None of our shareholders has different voting rights from other shareholders.

We are not owned or controlled, directly or indirectly, by another corporation or by any foreign government. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

Except as indicated in footnotes to this table, we believe that the shareholders 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 shareholders. Unless otherwise noted below, each beneficial owner’s address is: c/o Arcturus Therapeutics Ltd., 10628 Science Center Drive, Suite 250, San Diego, California, 92121.

Ordinary Shares Beneficially Owned

	Ordinary Shares Beneficially Owned	
5% or Greater Shareholders	**Number**	**Percentage**
Craig Willett(1)	866,342	8.0%
ARK Investment Management LLC(2)	815,176	7.5%
Bradley Sorenson(3)	692,392	6.4%
Directors and Executive Officers		
Joseph E. Payne(4)	1,469,097	13.6%
Andrew Sassine(5)	257,178	2.4%
Padmanabh Chivukula(6)	732,548	6.8%
Peter C Farrell(7)	102,284	*
Magda Marquet(7)	36,332	*
James Barlow(7)	25,832	*
All directors and executive officers as a group (6 persons)	2,623,271	24.1%

* Represents beneficial ownership of less than 1% of our outstanding ordinary shares

(1) Based on a Schedule 13D filed with the SEC on February 7, 2018. Consists of (i) 108,282 Ordinary Shares held directly by Mr. Willett, (ii) 280,810 Ordinary Shares held by DUR Holdings, LC, (iii) 294,113 Ordinary Shares held by Phoenician Enterprises, Ltd., and (iv) 183,137 Ordinary Shares held by 6-W Discretionary Trust. Mr. Willett is the president of Elizann, Inc., which is the manager of DUR Holdings, LC, and therefore Mr. Willett may be deemed to have voting and investment power with respect to the securities held by DUR Holdings, LC. Mr. Willett is the general partner of Phoenician Enterprises, Ltd. and therefore may be deemed to have voting and investment power with respect to the securities held by Phoenician Enterprises, Ltd. Mr. Willett is the trustee of 6-W Discretionary Trust and therefore may be deemed to have voting and investment power with respect to the securities held by 6-W Discretionary Trust.

(2) Based solely on Form 13F filed as of December 31, 2018.

(3) Based solely on a Schedule 13D filed with the SEC on May 24, 2018. Consists of (i) 658,366 Ordinary Shares, (ii) presently-exercisable options to purchase 4,669 Ordinary Shares, and (iii) call options to purchase an aggregate of an additional 26,357 Ordinary Shares. The shareholder may own additional shares that would not have been required to have been subsequently reported.

(4) Based on Form 3 filed on January 1, 2019, of which 366,274 shares are subject to repurchase by the Company.

(5) Based on Form 3 filed on January 1, 2019 and 19,582 option shares exercisable are included.

(6) Based on Form 3 filed on January 1, 2019, of which 183,137 shares are subject to repurchase by the Company

(7) Based on Form 3 filed on January 1, 2019 and 15,832 options shares exercisable are included.

Securities Authorized for Issuance Under Equity Compensation Plans

The following information is provided as of December 31, 2018 with respect to the Company's equity compensation plans:

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column a) (c)
Equity compensation plans approved by security holders(1)	1,189,433	$ 7.41	470,000
Equity compensation plans not approved by security holders	—	$ —	—
Total	1,189,433	$ 7.41	470,000

(1) The number of securities to be issued upon exercise of outstanding awards reflected in column (a) is from the 2010 and 2018 plans. The number of securities remaining available for future issuance under equity compensation plans reflected in column (c) is from the 2018 plan.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Related party transactions

See “Memorandum and Articles of Association—Approval of Related Party Transactions” of our Annual Report on Form 20-F for the fiscal year ended December 31, 2017 for a discussion of the requirements of Israeli law regarding special approvals for transactions involving directors, officers or controlling shareholders.

Providence Agreement

During 2016, the Company entered into a Research Collaboration and License Agreement with a related party, Providence Therapeutics, Inc. (“Providence”) whose CEO and President is also a shareholder of the Company, to identify and optimize microRNA modulators and/or mimetics for the treatment of neoplastic diseases. In April 2017, the Providence Agreement was amended to include mRNA for the treatment of neoplastic disease. In July 2018, the Providence Agreement was amended and restated to cover brain neoplasms, breast neoplasms and ovarian neoplasms. Each party is responsible for their own research costs under the agreement, and Providence is responsible for all of the development costs through the completion of Phase 2 clinical trials. The Company is entitled to share a percentage of future product revenue of each product provided the Company shares in the same percentage of the product’s post Phase 2 costs. Separately, Providence has agreed to pay a specified rate for the use of the Company’s employees. For the years ended December 31, 2018 and 2017, the Company has recognized $0.6 million and $1.0 million, respectively, in revenue related to the amortization of the upfront payment and revenue related to the use of Company employees and expense reimbursements. There was no outstanding accounts receivable balance related to this agreement as of December 31, 2018 and December 31, 2017. During the third quarter of 2017, the Company’s ordinary share agreement for the President and CEO of Providence was modified to remove the vesting conditions of the original grant and the Company recognized $1.5 million in related stock compensation expense. As of December 31, 2018, the President and CEO of Providence held a 6.4% ownership interest in the Company.

Employment Agreements

We have entered into written employment agreements with each of our executive officers. These agreements provide for notice periods of varying duration for termination of the agreement by us or by the relevant executive officer, during which time the executive officer will continue to receive base salary and benefits. We have also entered into customary non-competition, confidentiality of information and ownership of inventions arrangements with our executive officers. However, the enforceability of the noncompetition provisions may be limited under applicable law.

Options

Since our inception we have granted options to purchase our Ordinary Shares to our officers and certain of our directors. Such option agreements may contain acceleration provisions upon certain merger, acquisition, or change of control transactions. See Note 11 of our Notes to Consolidated Financial Statements for additional information. 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.

Indemnification Agreements and Insurance Coverage

Our amended and restated articles of association permit us to exculpate, indemnify and insure each of our directors and office holders to the fullest extent permitted by the Companies Law. We have entered into indemnification agreements with each of our directors and other office holders, undertaking to indemnify them to the fullest extent permitted by Israeli law. We have also obtained Directors’ & Officers’ insurance for each of our officers and directors.

Previously Disclosed Litigation in Israel and California and California Arbitration

On May 27, 2018, the Company entered into an Agreement and Release with former directors Stuart Collinson, Craig Willett, Daniel Geffken, David Shapiro (the "Resigning Directors") and current director Joseph Payne. The settlement agreement was approved by the Israeli District Court on May 28, 2018 and the Company's shareholders at its July 2018 extraordinary general meeting. Pursuant to the settlement agreement, all of the lawsuits and the arbitration resulting from disputes among the Company and certain of its directors were terminated.

In addition, pursuant to the settlement agreement, the Resigning Directors resigned from the Company's board of directors and from any other position in the Company, the Company agreed to vest the unvested shares of restricted stock owned by one Resigning Director, the Company agreed to maintain in effect the Company's existing directors' and officers' insurance policies on the same or better terms and the Company agreed to purchase a directors and officers "tail" insurance policy covering all current and former directors and officers for any acts or events occurring prior to the effective date of the settlement agreement for a period of at least six years. The Company also agreed to reimburse each of Mr. Payne and Dr. Chivukula for all of their respective reasonable fees and expenses incurred in connection with the pending litigation identified above and the entry into the settlement agreement.

Interests of experts and counsel

Not applicable.

MARKET PRICE AND DIVIDEND INFORMATION

Information regarding the principal market for ordinary shares of Arcturus-Israel and related shareholder matters is as follows.

Our Ordinary Shares have been listed on the NASDAQ Global Market under the symbol “ARCT” since November 15, 2017. Previously, our Ordinary Shares were listed on the NASDAQ Global Market under the symbol “ADHD” beginning May 22, 2013 and beginning on March 28, 2014 our Ordinary Shares were listed on the NASDAQ Global Market under the symbol “ADHD.” to Prior to May 22, 2013, there was no public trading market for our Ordinary Shares. Our initial public offering was priced at $8.00 per share on May 21, 2013. The following table sets forth for the periods indicated the high and low sales prices per ordinary share as reported on the NASDAQ Capital Market and the NASDAQ Global Market:

Annual Information:	Low	High
2013	$6.50	26.96
2014	3.12	25.44
2015	3.68	9.50
2016	1.77	6.50
Quarterly Information		
First Quarter 2015	$3.68	8.30
Second Quarter 2015	5.38	8.84
Third Quarter 2015	5.61	9.50
Fourth Quarter 2015	5.28	8.78
First Quarter 2016	3.15	6.50
Second Quarter 2016	3.61	5.75
Third Quarter 2016	1.95	5.36
Fourth Quarter 2016	1.77	2.90
First Quarter 2017	$5.81	18.04
Second Quarter 2017	7.07	9.31
Third Quarter 2017	6.52	8.75
Fourth Quarter 2017	6.72	15.19
First Quarter 2018	4.78	10.45
Second Quarter 2018	4.90	9.56
Third Quarter 2018	7.11	10.00
Fourth Quarter 2018	4.11	9.25
First Quarter 2019	4.26	5.79

On , 2019, the most recent practicable date before the date of this proxy statement/prospectus, the closing price of the Arcturus-Israel ordinary shares on NASDAQ was $ per share.

Dividend Policy

We have not paid cash dividends on our common stock since our inception and we do not contemplate paying dividends in the foreseeable future.

LEGAL MATTERS

Dentons US LLP will pass upon the validity of the shares of Arcturus-Delaware common stock offered by this proxy statement/prospectus.

Certain U.S. federal income tax consequences relating to the Transaction will be passed upon for Arcturus by Dentons US LLP.

EXPERTS

The consolidated financial statements of Arcturus Therapeutics Ltd. at December 31, 2018, and for the year ended December 31, 2018, appearing in this Proxy Statement/Prospectus and Registration Statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Arcturus Therapeutics Ltd. at December 31, 2017, and for year then ended, have been audited by Kost Forer Gabbay and Kasierer, a member of Ernst & Young Global, independent registered public accounting firm, as set forth in their report appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

SELECTED FINANCIAL DATA

Not applicable because we are a smaller reporting company.

SUPPLEMENTARY FINANCIAL INFORMATION

Not applicable because we are a smaller reporting company.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable because we are a smaller reporting company.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference rooms located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. These SEC filings are also available to the public on the SEC's website at: *http://www.sec.gov.*

Our website is located at *http://www.arcturusrx.com*. Arcturus-Delaware's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings with the SEC are available, free of charge, through this website as soon as reasonably practicable after those reports or filings are electronically filed with or furnished to the SEC. Information on Arcturus-Delaware's website or any other website is not incorporated by reference in this proxy statement/prospectus and does not constitute a part of this proxy statement/prospectus.

You may request a free copy of the above filings or any filings we make with the SEC by writing or calling:

Investor Relations, Arcturus Therapeutics Ltd.
10628 Science Center Drive, Suite 250
San Diego, California 92121
U.S.A.
Telephone No.: (858) 900-2660
Email:

In order to ensure timely delivery of these documents prior to the Expiration Date, you should make such request by [●], 2019.

We have not authorized anyone to give any information or make any representation about the Transaction or about us that differs from or adds to the information in this proxy statement/prospectus or in the documents incorporated by reference. Therefore, you should not rely upon any information that differs from or is in addition to the information contained in this proxy statement/prospectus or in the documents incorporated by reference.

The information contained in this proxy statement/prospectus speaks only as of the date on the cover, unless the information specifically indicates that another date applies.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
Arcturus Therapeutics Ltd.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Arcturus Therapeutics Ltd. and its subsidiaries (the Company) as of December 31, 2018, the related consolidated statements of operations and comprehensive loss, changes in shareholders' equity and cash flows for the year ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018, and the results of its operations and its cash flows for the year ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

The Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations, has negative cash flows from operations and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Ernst & Young LLP
We have served as the Company's auditor since 2018
San Diego, California
March 15, 2019

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of

ARCTURUS THERAPEUTICS LTD. (FORMERLY ALCOBRA LTD.)

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Arcturus Therapeutics Ltd. (formerly Alcobra Ltd.) and its subsidiaries (the "Company") as of December 31, 2017 and the related consolidated statements of operations and comprehensive loss, shareholders' equity and cash flows for the year ended December 31, 2017, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017, and the results of its operations and its cash flows for the year ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

We have served as the Company's auditor during 2018
Tel-Aviv, Israel
May 14, 2018

ARCTURUS THERAPEUTICS LTD. AND ITS SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(In U.S. dollars in thousands, except par value information)

	As of December 31,	
	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	$ 36,709	$ 24,965
Restricted cash	—	166
Short-term investments	—	23,608
Accounts receivable, net	4,481	480
Prepaid expenses and other current assets	638	1,059
Intangible asset held for sale	—	590
Total current assets	41,828	50,868
Property and equipment, net	1,975	1,049
Equity method investment	288	—
Non-current restricted cash	107	107
Total assets	$ 44,198	$ 52,024
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable	$ 2,398	$ 1,790
Accrued liabilities	3,907	2,793
Deferred revenue	6,272	6,457
Total current liabilities	12,577	11,040
Deferred revenue, net of current portion	7,534	7,190
Long-term debt	9,911	—
Deferred rent	534	—
Total liabilities	30,556	18,230
Commitments and contingencies (Note 13)		
Shareholders' equity:		
Ordinary shares: 30,000 shares authorized, 10,762 issued, 10,719 outstanding and 43 held in treasury at December 31, 2018; NIS 0.07 par value; 30,000 shares authorized, 10,699 issued, 10,656 outstanding and 43 held in treasury at December 31, 2017;	214	212
Additional paid-in capital	58,302	56,674
Accumulated other comprehensive loss	—	(3)
Accumulated deficit	(44,874)	(23,089)
Total shareholders' equity	13,642	33,794
Total liabilities and shareholders' equity	$ 44,198	$ 52,024

The accompanying notes are an integral part of these consolidated financial statements.

ARCTURUS THERAPEUTICS LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

U.S. dollars in thousands (except per share data)

	Year Ended December 31,	
	2018	2017
Collaboration revenue	$ 15,753	$ 12,998
Operating expenses:		
Research and development, net	16,982	15,918
General and administrative	20,582	7,572
Total operating expenses	37,564	23,490
Net loss from operations	(21,811)	(10,492)
Loss from equity method investment	(302)	—
Finance income (expense), net	328	(409)
Net loss before taxes	(21,785)	(10,901)
Income tax expense	—	(1)
Net loss	$ (21,785)	$ (10,902)
Net loss per share, basic and diluted	$ (2.16)	$ (3.53)
Weighted-average shares outstanding, basic and diluted	10,069	3,087
Comprehensive loss:		
Net loss	$ (21,785)	$ (10,902)
Unrealized gain (loss) on short-term investments	3	(3)
Comprehensive loss	$ (21,782)	$ (10,905)

The accompanying notes are an integral part of these consolidated financial statements.

ARCTURUS THERAPEUTICS LTD. AND ITS SUBSIDIARIES
STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

U.S. dollars in thousands

	Series Seed Preferred Stock		Series A Preferred Stock		Ordinary Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount				
BALANCE — December 31, 2016	**1,284**	**$ —**	**1,481**	**$ —**	**2,801**	**$ —**	**$ 13,764**	**$ —**	**$ (12,187)**	**$ 1,577**
Net loss	—	—	—	—	—	—	—	—	(10,902)	(10,902)
Unrealized loss on short-term investments	—	—	—	—	—	—	—	(3)	—	(3)
Share-based compensation	—	—	—	—	—	—	2,170	—	—	2,170
Issuance of common shares upon exercise of share options	—	—	—	—	348	—	675	—	—	675
Issuance of shares upon exercise of warrants	—	—	—	—	189	—	160	—	—	160
Issuance of shares upon conversion of notes	—	—	—	—	617	—	5,957	—	—	5,957
Conversion of preferred shares to ordinary shares	(1,284)	—	(1,481)	—	2,765	—	—	—	—	—
Beneficial conversion expense from notes	—	—	—	—	—	—	348	—	—	348
Issuance of shares in connection with merger, net	—	—	—	—	3,979	212	33,600	—	—	33,812
BALANCE — December 31, 2017	**—**	**$ —**	**—**	**$ —**	**10,699**	**$ 212**	**$ 56,674**	**$ (3)**	**$ (23,089)**	**$ 33,794**
Net loss	—	—	—	—	—	—	—	—	(21,785)	(21,785)
Unrealized gain on short-term investments	—	—	—	—	—	—	—	3	—	3
Share-based compensation	—	—	—	—	—	—	1,259	—	—	1,259
Issuance of common shares upon exercise of share options	—	—	—	—	63	2	369	—	—	371
BALANCE — December 31, 2018	**—**	**$ —**	**—**	**$ —**	**10,762**	**$ 214**	**$ 58,302**	**$ —**	**$ (44,874)**	**$ 13,642**

The accompanying notes are an integral part of these consolidated financial statements.

ARCTURUS THERAPEUTICS LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

	Year Ended December 31,	
	2018	2017
OPERATING ACTIVITIES:		
Net loss	$ (21,785)	$ (10,902)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	582	410
Share-based compensation expense	1,259	2,170
Loss from equity method investment	302	—
Non cash interest expenses	38	150
Debt conversion expense	—	348
Changes in operating assets and liabilities:		
Accounts receivable	(4,001)	3,153
Prepaid expenses and other assets	421	(202)
Accounts payable	578	(1,537)
Accrued liabilities	1,687	(104)
Deferred revenue	159	6,054
Net cash used in operating activities	(20,760)	(460)
INVESTING ACTIVITIES:		
Acquisition of property and equipment	(1,478)	(251)
Purchases of short-term investments	(6,594)	—
Proceeds from sale of equipment	—	29
Proceeds from maturities of short-term investments	30,206	10,577
Net cash provided by investing activities	22,134	10,355
FINANCING ACTIVITIES:		
Proceeds from long-term debt, net of debt issuance costs	9,872	—
Proceeds from exercise of stock options	332	711
Proceeds from issuance of convertible promissory notes	—	5,650
Proceeds from exercise of warrants	—	160
Net cash received in the issuance of shares for the net assets of Alcobra Ltd.	—	477
Net cash provided by financing activities	10,204	6,998
NET INCREASE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	11,578	16,893
Cash, cash equivalents and restricted cash at beginning of year	25,238	8,345
Cash, cash equivalents and restricted cash at end of year	$ 36,816	$ 25,238
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 146	$ —
Cash paid for income taxes	$ —	$ 35
Sale of intangible assets for equity method investment	$ 590	$ —
Purchase of property and equipment in accounts payable	$ 30	$ —
Release of repurchase liability for restricted shares	$ 39	$ —
Conversion of notes to ordinary shares	$ —	$ 5,957
Fair value of assets acquired, excluding cash, cash equivalents and restricted cash	$ —	$ 35,241
Less: liabilities assumed	$ —	$ (1,906)
Net assets acquired, excluding cash, cash equivalents and restricted cash	$ —	$ 33,335

The accompanying notes are an integral part of these consolidated financial statements.

Arcturus Therapeutics Ltd. and its Subsidiaries
Notes to Consolidated Financial Statements

Note 1. Organization

Description of Business

Arcturus Therapeutics Ltd. and its subsidiaries (referred to as the "Company") is a RNA medicines company focused on significant opportunities in rare, liver, and respiratory diseases. The Company's key proprietary technology has the potential to address the major hurdles in RNA development, namely the effective and safe delivery of RNA therapeutics to disease-relevant target tissues.

Reverse Merger

On November 15, 2017, Alcobra Ltd. acquired Arcturus Therapeutics, Inc. pursuant to a merger between the companies (the "merger"). Prior to the merger, Alcobra Ltd.'s net assets consisted of cash, investments and nominal non-operating assets. Upon consummation of the merger, Alcobra Ltd. adopted the business plan of Arcturus Therapeutics, Inc. In connection with the merger, Alcobra Ltd. agreed to acquire all of the outstanding common stock of Arcturus Therapeutics, Inc. in exchange for the issuance of an aggregate 6,631,712 of Alcobra Ltd.'s Ordinary Shares, par value 0.07 NIS per share (the "Ordinary Shares"), after giving effect to a 1-for-7 reverse split effected immediately prior to the merger. As a result of the merger, Arcturus Therapeutics, Inc. became a wholly-owned subsidiary of Alcobra Ltd. While Alcobra Ltd. was the legal acquirer in the transaction, Arcturus Therapeutics, Inc. was deemed the accounting acquirer. Immediately after giving effect to the merger, on November 15, 2017, Alcobra Ltd. changed its name to Arcturus Therapeutics Ltd. ("Arcturus" or the "Company"). On November 16, 2017, the Company commenced trading under the symbol "ARCT." The Company's principal executive offices and location of all operations are in San Diego, California.

In accordance with the authoritative literature, a transaction where a private company merges into a public company with no operations and nominal net assets should be accounted for as a capital transaction rather than a business combination. Consequently, the reverse merger was accounted for as an issuance of shares by the Company for the net assets of Alcobra Ltd., accompanied by a recapitalization. Excess of considerations paid over net assets acquired and other merger-related costs were recorded as a charge to additional paid-in capital as discussed in Note 6. While Alcobra Ltd. was the legal acquirer in the merger, Arcturus was deemed the accounting acquirer. As a result, the financial statements of the Company prior to the merger date are the historical financial statements of Arcturus whereas the financial statements of the Company after the merger date reflect the results of the operations of Arcturus and Alcobra Ltd. on a combined basis. All historical information presented herein has been retroactively restated to reflect the effect of the merger shares exchange ratio, reverse stock split and change to the authorized number of Ordinary Shares in accordance with Accounting Standards Codification Topic 260, *"Earnings Per Share"*.

Going Concern

The Company's activities since inception have consisted principally of performing research and development activities and raising capital. The Company's activities are subject to significant risks and uncertainties, including failing to secure additional funding before the Company achieves sustainable revenues and profit from operations.

The Company is a pre-clinical bioscience company that is dependent on obtaining external equity and debt financings to fund its operations. Historically, the Company's primary source of financing has been through the sale of its securities, through issuance of debt and through collaboration agreements. The Company raised $10.0 million in gross proceeds from a long-term debt agreement executed in October 2018 (Note 9). In addition, in October 2018, the Company entered into a Sales Agreement (the "Sales Agreement") with Leerink Partners LLC ("Leerink"), pursuant to which it may sell from time to time, at its option, up to an aggregate of

$30.0 million of the Company's ordinary shares through Leerink, as sales agent. Research and development activities have required significant capital investment since the Company's inception.

The Company expects its operations to continue to require cash investment to pursue the Company's research and development activities, including preclinical studies, formulation development, clinical trials and related drug manufacturing. The Company has experienced net losses since its inception and as of December 31, 2018 has an accumulated deficit of $44.9 million. The Company expects to continue to incur additional losses for the foreseeable future, and the Company will need to raise additional debt or equity financing or enter into additional collaborations to fund its development. The ability of the Company to transition to profitability is dependent on identifying and developing successful mRNA drug candidates. In the near future, if the Company is not able to achieve planned milestones, incurs costs in excess of its forecasts, or does not meet covenant requirements of its debt (Note 9), it will need to reduce discretionary spending, discontinue the development of some or all of its products, which will delay part of its development programs, all of which will have a material adverse effect on the Company's ability to achieve its intended business objectives. There can be no assurances that additional financing will be secured or, if secured, will be on favorable terms. Management has prepared cash flow forecasts which indicate that based on the Company's expected operating losses and negative cash flows, there is substantial doubt about the Company's ability to continue as a going concern within twelve months after the date that the financial statements for the year ended December 31, 2018, are issued. The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The consolidated financial statements do not reflect any adjustments related to the recoverability and classification of assets or the amounts and classification of liabilities that might be necessary if the Company is unable to continue as a going concern.

Note 2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Arcturus Therapeutics Ltd. and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. These financial statements are prepared in conformity with accounting principles generally accepted in the United States (U.S. GAAP), which requires management to make estimates and assumptions regarding the valuation of certain debt and equity instruments, the equity method investment, share-based compensation, accruals for liabilities, income taxes, revenue and deferred revenue, expense accruals, and other matters that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates.

Segment Information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker in making decisions regarding resource allocation and assessing performance. The Company and its chief operating decision-maker view the Company's operations and manage its business in one operating segment which is the research and development of medical applications for the Company's nucleic acid-focused technology.

Cash and Cash Equivalents

Cash equivalents are short-term highly liquid investments that are readily convertible to cash with original maturities of three months or less at the date of purchase.

Arcturus Therapeutics Ltd. and its Subsidiaries
Notes to Consolidated Financial Statements — Continued

Restricted cash

Restricted cash represents cash required to be set aside as security for lease payments and to maintain a letter of credit for the benefit of the landlord for the Company's offices. At December 31, 2018 and 2017, the Company had restricted cash of $107,000 in conjunction with property leases in San Diego, California, and such restriction is expected to be removed at the end of the lease term in 2025. At December 31, 2017, the Company also had restricted cash of $166,000 in conjunction with property leases in Israel, and such restriction was lifted in 2018.

Short-term Bank Deposits

Short-term bank deposits (Note 4) are deposits with maturities of more than three months and up to one year when acquired. Short-term bank deposits are presented at their cost, including accrued interest and are included in the balance of short-term investments in the consolidated balance sheet.

Short-term Investments

The Company accounts for short-term investments (Note 4) in accordance with ASC No. 320, *Investments- Debt and Equity Securities*. Management determines the appropriate classification of its investments at the time of purchase and reevaluates such determinations at each balance sheet date.

The Company has classified all of its debt securities and certificates of deposit as available-for-sale securities. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported in accumulated other comprehensive loss in shareholders' equity. Realized gains and losses on sales of investments are included in interest income and are derived using the specific identification method for determining the cost of securities.

The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization together with interest and dividends on securities are included in interest income.

The Company recognizes an impairment charge when a decline in the fair value of its investments in debt securities below the amortized cost basis of such securities is judged to be other-than-temporarily impaired. Factors considered in making such a determination include the duration and severity of the impairment, the reason for the decline in value, the potential recovery period and if the entity has the intent to sell the security, or if it is more likely than not that it will be required to sell the security before recovery of its amortized cost basis. The Company did not recognize any other-than-temporary impairment charges on its marketable securities during the year ended December 31, 2017. The Company held no available-for-sale securities as of December 31, 2018.

Fair Value Measurements

Fair value is defined as the exit price, or the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. A hierarchy has been established for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available (Note 5).

Observable inputs are inputs market participants would use in valuing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect

the Company's assumptions about the factors market participants would use in valuing the asset or liability developed based upon the best information available under the circumstances. The hierarchy consists of three levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs (other than quoted prices) that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability. Categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Accounts Receivable

Accounts receivable are recorded at the net invoice value and are non-interest bearing. The Company considers receivables past due based on the contractual payment terms. The Company reserves specific receivables if collectability is no longer reasonably assured. Estimates for allowances for doubtful accounts are determined based on existing contractual obligations, historical payment patterns, and individual customer circumstances. The Company reevaluates such reserves on a regular basis and adjusts its reserves as needed. Once a receivable is deemed to be uncollectible, such balance is charged against the reserve. No reserves have been recorded as of December 31, 2018 or 2017.

Concentration of Credit Risk and Significant Customers

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist of cash, cash equivalents and short-term investments. The Company limits its exposure to credit loss by placing its cash, cash equivalents, and investments with high credit quality financial institutions in instruments with short maturities.

There was one customer that comprised 96% of the total accounts receivable balance at December 31, 2018 and one customer that comprised the total accounts receivable balance at December 31, 2017.

For the year ended December 31, 2018, the Company's top three customers collectively represented 80% of the Company's total revenue. For the year ended December 31, 2017, there were three customers that collectively represented 92% of the Company's total revenue.

Intangible Assets Held for Sale and Equity Method Investment

At the end of the second quarter of 2018, the Company completed the sale of its intangible assets related to the ADAIR technology, which was accounted for as an intangible asset held for sale as of December 31, 2017. Pursuant to the asset purchase agreement for ADAIR, the Company received a 30% ownership interest in the common stock of a privately held company in consideration for the sale of the ADAIR technology. As this ownership interest is greater than 20% and one executive of the Company holds a seat on the investee's board of directors, the Company has the ability to exercise significant influence over the operating and financial policies of this investee; therefore, the Company accounts for this investment as an equity method investment. The Company has no requirement to invest further in this private company and the ownership percentage may be diluted in the future. The Company will account for this investment as an equity method investment until the investment no longer meets the definition of an equity method investment.

The Company accounts for its share of the earnings or losses of the investee with a reporting lag of three months beginning the third quarter of 2018, as the financial statements of the investee are not completed on a basis that is sufficient for the Company to apply the equity method on a current basis. The Company has recorded $0.3 million of its share of losses of the investee as of December 31, 2018.

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Notes to Consolidated Financial Statements — Continued

Property and Equipment, net

Property and equipment are stated at cost, net of accumulated depreciation and amortization. The cost of property and equipment is depreciated or amortized using the straight-line method over the respective useful lives of the assets, ranging from three to five years. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful life of the asset or the lease term. Long-lived assets, including property and equipment are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable. The determinants used for this evaluation include management's estimate of the asset's ability to generate positive income from operations and positive cash flow in future periods, as well as the strategic significance of the assets to the Company's business objectives. The Company did not recognize any impairment losses for the years ended December 31, 2018 or 2017.

Comprehensive Income/Loss

Comprehensive income/loss is defined as the change in shareholders' equity during a period from transactions and other events and circumstances from non-owner sources. Comprehensive loss represents unrealized losses on the Company's marketable securities. The income tax effect related to unrealized losses was immaterial for December 31, 2018 or 2017.

Revenue Recognition

The Company recognizes revenue when each of the following four criteria is met: (i) persuasive evidence of an arrangement exists; (ii) products are delivered or as services are rendered; (iii) the sales price is fixed or determinable; and (iv) collectability is reasonably assured.

Multiple-element arrangements may include (i) grants of licenses, or options to obtain licenses, to intellectual property, (ii) research and development services, (iii) participation on joint research or joint development committees, or (iv) manufacturing or supply services. Payments the Company may receive under these arrangements typically include one or more of the following: non-refundable upfront license fees, option exercise fees, funding of research or development efforts, amounts due upon the achievement of specified objectives, or royalties on future product sales.

Multiple-element arrangements require the separability of deliverables included in an arrangement into different units of accounting and the allocation of arrangement consideration to the units of accounting. The evaluation of multiple-element arrangements requires management to make judgments about (i) the identification of deliverables, (ii) whether such deliverables are separable from the other aspects of the contractual relationship, (iii) the estimated selling price of each deliverable, and (iv) the expected period of performance for each deliverable.

To determine the units of accounting under a multiple-element arrangement, management evaluates certain separation criteria, including whether the deliverables have stand-alone value, based on the relevant facts and circumstances for each arrangement. Management then estimates the selling price for each unit of accounting and allocates the arrangement consideration to each unit using the relative selling price method. The allocated consideration for each unit of accounting is recognized based on the method most appropriate for that unit of account and in accordance with the revenue recognition criteria detailed above.

If there are deliverables in an arrangement that are not separable from other aspects of the contractual relationship, they are treated as a combined unit of accounting, with the allocated revenue for the combined unit recognized in a manner consistent with the revenue recognition applicable to the final deliverable in the

combined unit. Payments received prior to satisfying the relevant revenue recognition criteria are recorded as deferred revenue in the accompanying consolidated balance sheets and recognized as revenue when the related revenue recognition criteria are met.

Most of the collaboration agreements provide for non-refundable milestone payments. The Company recognizes revenue that is contingent upon the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. A milestone is considered substantive when the consideration payable to the Company for such milestone (i) is consistent with its performance necessary to achieve the milestone or the increase in value to the collaboration resulting from its performance, (ii) relates solely to its past performance and (iii) is reasonable relative to all of the other deliverables and payments within the arrangement. In making this assessment, management considers all facts and circumstances relevant to the arrangement, including factors such as the scientific, regulatory, commercial and other risks that must be overcome to achieve the milestone, the level of effort and investment required to achieve the milestone and whether any portion of the milestone consideration is related to future performance or deliverables.

Management periodically reviews the estimated performance periods under the collaboration agreements, which provide for non-refundable upfront payments and fees. Management adjusted the periods over which revenue was recognized when appropriate to reflect changes in assumptions relating to the estimated performance periods. In the first quarter of 2019, the Company will adopt new accounting guidance that will change future patterns of revenue recognition.

The Company records revenues related to the reimbursement of costs incurred under the collaboration agreements where it acts as a principal, controls the research or development activities and bears credit risk. Under its collaboration agreements, the Company is reimbursed for associated out-of-pocket costs and for a certain amounts of full-time equivalent, or FTE, costs based on an agreed-upon FTE rate. The gross amount of these pass-through reimbursed costs is reported as revenue in the accompanying consolidated statements of operations and comprehensive loss, while the actual expenses for which the Company is reimbursed are reflected as research and development costs.

Research and Development Costs, net

Research and development costs are expensed as incurred. These expenses result from the Company's independent research and development efforts as well as efforts associated with collaboration arrangements. Research and development costs include salaries and personnel-related costs, consulting fees, fees paid for contract research and manufacturing services, the costs of laboratory supplies, equipment and facilities and other external costs are shown net of any grants.

Share-Based Compensation

The Company recognizes share-based compensation for equity awards granted to employees, officers, and directors as an expense on the statements of operations. Share-based compensation is recognized over the requisite service period of the individual awards using the straight-line attribution method, which generally equals the vesting period. Share options have a ten-year life and generally vest 25% on the first anniversary of the grant and in 1/48th equal installments on each monthly anniversary thereafter, such that options are fully vested on the four-year anniversary of the date of grant.

The fair value of share options is estimated using a Black-Scholes valuation model on the date of grant. This method requires certain assumptions be used as inputs, such as the fair value of the underlying common shares,

expected term of the option before exercise, expected volatility of the Company's Ordinary Shares, expected dividend yield, and a risk-free interest rate. The Company has limited historical share option activity and therefore estimates the expected term of share options granted using the simplified method, which represents the average of the contractual term of the share option and its weighted-average vesting period. The expected volatility of share options is based upon the historical volatility of a peer group of publicly traded companies. The Company has not declared or paid any dividends and do not currently expect to do so in the foreseeable future. The risk-free interest rates used are based on the implied yield currently available in United States Treasury securities at maturity with a term equivalent to the expected term of the share options. The effect of forfeited awards is recorded when the forfeiture occurs.

Share-based awards granted to non-employees are remeasured at each reporting date and compensation costs are recognized as services are rendered, generally on a straight-line basis. The Company believes that the fair value of these awards is more reliably measurable than the fair value of the services rendered. There were no share-based awards granted to non-employees during 2018 and 2017.

Ordinary Shares Valuation

Prior to the merger and due to the absence of an active market for the Company's ordinary shares, the Company utilized third-party valuations which utilized methodologies in accordance with the framework of the American Institute of Certified Public Accountants Technical Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation, to estimate the fair value of its Ordinary Shares.

Statement of cash flows

The following table provides a reconciliation of cash and cash equivalents and restricted cash reported within the consolidated balance sheets to the total of the same such amounts shown in the consolidated statement of cash flows:

	As of December 31,	
(in thousands)	**2018**	**2017**
Cash and cash equivalents	$36,709	$24,965
Restricted cash	—	166
Non-current Restricted cash	107	107
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	$36,816	$25,238

Income Tax Expense

Income taxes are accounted for using an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting basis and the tax basis of the Company's assets and liabilities at the applicable tax rates, along with net operating loss and tax credit carryovers. The Company records a valuation allowance against its deferred tax assets to reduce the net carrying value to an amount that it believes is more likely than not to be realized. Management has considered estimated taxable income and ongoing prudent and feasible tax planning strategies in assessing the amount of the valuation allowance. Based upon the weight of available evidence, which includes the Company's historical operating performance and limited potential to utilize tax credit carryforwards, the Company has determined that total deferred tax assets should be fully offset by a valuation allowance. When the Company establishes or reduces the valuation allowance against its deferred tax assets, its provision for income taxes will increase or decrease, respectively, in the period such determination is made.

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The Company is required to file federal and state income tax returns in the United States and various other state jurisdictions. The Company also files income tax returns in the foreign countries in which it operates. The preparation of these income tax returns requires the Company to interpret the applicable tax laws and regulations in effect in such jurisdictions, which could affect the amount of tax paid by the Company.

Additionally, the Company follows an accounting standard addressing the accounting for uncertainty in income taxes that prescribes rules for recognition, measurement, and classification in the consolidated financial statements of tax positions taken or expected to be taken in a tax return.

The Tax Cuts and Jobs Act (the Act) was enacted on December 22, 2017 resulting in significant modifications to existing law. The Company follows the guidance of Staff Accounting Bulletin (SAB) 118, which provides additional clarification regarding the application of ASC 740 in situations where the Company does not have the necessary information available, prepared or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Act for the reporting period in which the Act was enacted. SAB 118 provides for a measurement period beginning in the reporting period that includes the Act's enactment and ending when the Company has obtained, prepared and analyzed the information needed in order to complete the accounting requirements, but in no circumstances should the measurement period extend beyond one year from the enactment date.

The Company has completed its analysis of the Act's income tax effects. In total, the Company recorded $2.4 million related to the remeasurement of deferred tax assets which was fully offset by a corresponding decrease in the valuation allowance.

Net Loss per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of ordinary shares outstanding for the period, without consideration for ordinary share equivalents. Diluted net loss per share is calculated by dividing the net loss by the weighted-average number of ordinary shares and dilutive ordinary share equivalents outstanding for the period determined using the treasury-stock method. Dilutive ordinary shares for the year ended December 31, 2018 are comprised of share options. For the year ended December 31, 2017, dilutive ordinary shares are comprised of options, convertible preferred stock, convertible notes, and warrants.

No dividends were declared or paid during the reported periods.

Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) amended the existing Accounting Standards Update (ASU) for revenue recognition No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), which outlines a comprehensive revenue recognition model and supersedes most current revenue recognition guidance. ASU 2014-09 outlines a five-step process for revenue recognition that focuses on transfer of control, as opposed to transfer of risk and rewards, and also requires enhanced disclosures regarding the nature, amount, timing and uncertainty of revenues and cash flows from contracts with customers. Major provisions include determining which goods and services are distinct and require separate accounting (performance obligations), how variable consideration (which may include change orders and claims) is recognized, whether revenue should be recognized at a point in time or over time and ensuring the time value of money is considered in the transaction price.

The FASB subsequently issued amendments to ASU No. 2014-09 that have the same effective date and transition date. These new standards will become effective for the Company on January 1, 2019. The Company

will implement the new guidance using the modified retrospective approach. The Company has performed a review of these new standards as compared to its current accounting policies for collaborative relationships. The Company is evaluating the impact of the new standard on historical revenue recorded for its collaboration agreements. This ongoing evaluation is dependent upon the resolution of certain questions relating to the application of the new revenue recognition guidance for collaboration agreements which will ultimately determine the impact, if any, the adoption of this standard may have on the consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases*, which outlines a comprehensive lease accounting model and supersedes the current lease guidance. The new accounting standard requires lessees to recognize lease liabilities and corresponding right-of-use assets for all leases with lease terms of greater than twelve months. It also changes the definition of a lease and expands the disclosure requirements of lease arrangements. The new accounting standard must be adopted using the modified retrospective approach and is effective for entities for annual reporting periods beginning after December 15, 2018, with early adoption permitted.

In July 2018, the FASB issued ASU 2018-11, Leases (Topic 842): *Targeted Improvements*, provides entities an optional transition method to apply the new guidance as of the adoption date, rather than as of the earliest period presented. In transition, entities may also elect a package of practical expedients that must be applied in its entirety to all leases commencing before the effective date, unless the lease modified, to not reassess (a) the existence of a lease, (b) lease classification or (c) determination of initial direct costs, which effectively allows entities to carryforward accounting conclusions under previous U.S. GAAP. The Company will adopt the standard on January 1, 2019, using the optional transition method to apply the new guidance as of January 1, 2019, rather than as of the earliest period presented, and elect the package of practical expedients described above.

The Company expects Topic 842 will have a material effect on its consolidated balance sheet. However, the Company does not expect Topic 842 will have a material effect on its consolidated statements of operations and comprehensive loss or consolidated statements of cash flows. While the Company continues to assess all of the effects of adoption, the most significant effects relate to (1) the recognition of right-of-use (ROU) assets and lease liabilities within a range of approximately $5.5 million to $6.5 million using an assumed incremental borrowing rate of 8.4%, primarily resulting from leases of office and laboratory space; (2) the derecognition of deferred rent of approximately $0.5 million for certain lease incentives received; and (3) significant new disclosure requirements.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, which amends the FASB Accounting Standards Codification in order to simplify the accounting for share-based payments granted to nonemployees for goods and services. Under the ASU, most of the guidance on such payments to nonemployees will be aligned with the requirements for share-based payments granted to employees. The guidance mandates the modified retrospective approach and is effective for annual and interim reporting periods beginning after December 31, 2018, with early adoption permitted. The Company plans to adopt this guidance in the first quarter of 2019 and does not expect adoption will have a material impact on the Company's consolidated financial statements.

Recently Adopted Accounting Pronouncements

Effective January 1, 2017, the Company adopted ASU No. 2017-09 *Compensation — Stock Compensation (Topic 718): Scope of Modification Accounting* (ASU No. 2017-09). ASU No. 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The Company's adoption of ASU No. 2017-09 had no impact on the Company's statements of financial position or results of operations and comprehensive loss.

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In November 2016, the FASB issued ASU 2016-18, *Restricted Cash*, which requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. This update is effective for annual periods beginning after December 15, 2017, and interim periods within those fiscal years with early adoption permitted. The Company adopted this pronouncement retrospectively effective in the December 31, 2017 consolidated financial statements. There was no effect on previously reported balances as a result of adoption of the standard.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations* (Topic 805): "*Clarifying the Definition of a Business*" which clarifies the definition of a business and affects all companies and other reporting organizations that must determine whether they have acquired or sold a business. The amendments are intended to assist with the evaluation of whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance is effective for the Company for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years and should be applied prospectively as of the beginning of the period of adoption. Early adoption is permitted under certain circumstances. The Company adopted ASU 2017-01 as of January 1, 2017 and the adoption did not have an impact on the Company's accounting and disclosures.

NOTE 3. Collaboration Revenue

The Company has entered into license agreements and collaborative research and development arrangements with pharmaceutical and biotechnology companies. Under these arrangements, the Company is entitled to receive license fees, upfront payments, milestone payments if and when certain research and development milestones or technology transfer milestones are achieved, royalties on approved product sales and reimbursement for research and development activities. The Company's costs of performing these services are included within research and development expenses. The Company's milestone payments are typically defined by achievement of certain preclinical, clinical, and commercial success criteria. Preclinical milestones may include in vivo proof of concept in disease animal model(s), lead candidate identification, and completion of IND-enabling toxicology studies. Clinical milestones may, for example, include successful enrollment of the first patient in or completion of Phase I, II, and III clinical trials, and commercial revenue, milestone or royalty-based, is often tiered based on net or aggregate sale amounts. The Company cannot guarantee the achievement of these milestones and economics due to risks associated with preclinical and clinical activities required for development of nucleic acid medicine-based therapeutics.

The following table summarizes the Company's collaboration revenues for the periods indicated (in thousands). Approximately $5.0 million and $1.0 million of total collaboration revenue represents revenue derived from foreign countries for the years ended December 31, 2018 and 2017, respectively.

(Dollars in thousands)	Year Ended December 31, 2018	2017
Collaboration Partner — Janssen	$ 1,232	$ 4,862
Collaboration Partner — Ultragenyx	6,794	5,639
Collaboration Partner — Takeda	1,137	1,403
Collaboration Partner — CureVac	4,427	—
Other	2,163	1,094
	$ 15,753	$ 12,998

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The following paragraphs provide information on the nature and purpose of these collaboration arrangements.

Collaboration Partner — Janssen

Janssen 2015 Agreements

In 2015 the Company entered into two agreements with Janssen. The primary focus of the collaboration is to develop nucleic acid therapeutics for Hepatitis B (HBV). The Company analyzed the form and substance of both of the agreements and concluded they should be evaluated as a single arrangement for accounting purposes. Upon execution of the agreements, the Company received an upfront payment of $2.0 million which was amortized over the estimated research and development period.

Under the 2015 agreements, the Company recognized revenue of $4.9 million during the year ended December 31, 2017. The revenue recognized as of December 31, 2017 included labor and expense reimbursements of $4.4 million with the remaining revenue representing the amortized portion of the upfront fee and milestone payment. During the quarter ended September 30, 2017, the 2015 agreement was terminated, and the remaining unamortized upfront payment was recognized as of September 30, 2017.

Janssen 2017 Agreement

In late-2017, the Company and Janssen entered into a new agreement. The Company reviewed the timing and nature of the arrangement upon the signing of the new agreement and determined that it was not linked to the prior agreements and should be considered as a standalone agreement.

The 2017 collaboration agreement allocated discovery, development, funding obligations, and ownership of related intellectual property among the Company and Janssen. The Company received an upfront payment of $7.7 million and may receive preclinical, development and sales milestone payments of $56.5 million, as well as royalty payments on any future licensed product sales. Janssen will reimburse the Company for research costs at a future defined period upon the achievement of the first research milestone. Janssen may also pay option exercise fees within the $1.0 million to $5.0 million range per target. Janssen will pay royalties on annual net sales of licensed products in the low to mid-single digits range, subject to reduction on a country-by-country and licensed-product-by-licensed-product basis and subject to certain events, such as expiration of program patents. In addition, the collaboration includes an exclusivity period.

As the license component of the contract has no standalone value, the license and the research and development activities, exclusivity, and joint steering committee obligations under this agreement should be considered as a single unit of accounting in the arrangement. The upfront fee of $7.7 million is being deferred and recognized as revenue using the proportional performance method as the Company determined that the deliverables are fulfilled in a pattern other than straight-line due to the structure and nature of the collaborative arrangement. Total deferred revenue as of December 31, 2018 and December 31, 2017 for Janssen was $6.5 million and $7.6 million, respectively. The Company recognized revenue of $1.2 million and $0.1 million for the years ended December 31, 2018 and 2017, respectively. The revenue recognized included labor and expense reimbursements of a negligible amount with the remaining revenue representing the recognized portion of the upfront fee.

Collaboration Partner — Ultragenyx

In 2015 the Company entered into an agreement with Ultragenyx. During the initial phase of the collaboration, the Company will design and optimize therapeutics for certain rare disease targets. Ultragenyx has

the option to add additional rare disease targets during the collaborative development period. Additionally, during the collaborative development period, the Company will participate with Ultragenyx in a joint steering committee. In addition, the collaboration includes an initial exclusivity period and an option to extend this period.

For each program, Ultragenyx will reimburse the Company for all internal and external development costs incurred and if Ultragenyx achieves certain, clinical, regulatory and sales milestones, then the Company is eligible to receive additional payments.

As part of the agreement, Ultragenyx paid an upfront fee and agreed to certain research and development funding obligations. The Company is also entitled to certain additional payments upon exercise of the Ultragenyx expansion option and/or exclusivity extension (if any), and for costs incurred by the Company in conducting the activities assigned under each collaboration development plan. In addition, on a development target-by-development target basis during the two-year period from the effective date of contract, Ultragenyx will pay the Company a one-time milestone payment after the first optimized lead designation for the first product with respect of such development target. For each development target for which Ultragenyx exercises its option, Ultragenyx will pay the Company a one-time option exercise fee within the $2.0 million to $5.0 million range per development target. In 2018, the Company signed an amendment with Ultragenyx, that may reduce milestone payments dependent on whether the Company does not incorporate a predefined chemistry methodology to increase mRNA half-life.

The agreement included potential milestone payments for selected targets from Ultragenyx to the Company. The current potential milestone payment for the remaining target as of December 31, 2018 is $69.5 million. Ultragenyx will pay royalties as a percentage of net sales on a product-by-product and country-by-country basis during the applicable royalty term up to and including double digits. As of December 31, 2018, the Company has not yet reached the clinical phase of the contract.

The Company concluded that the license, research and development activities, exclusivity, and joint steering committee obligations under this agreement should be considered a single unit of accounting in the arrangement, and the upfront fee of $10 million is being deferred and recognized as revenue over the same period as the estimated research activities. As of December 31, 2018, the amortization period is currently expected to end on March 31, 2019.

During 2017, the Company entered into an amendment with Ultragenyx to add one year to the exclusivity period for the reserved targets, in consideration for a one-time payment of $2.0 million. The extension of the exclusivity period did not change the length of the research and development period. Further, the amendment allows Ultragenyx the opportunity to review and comment on its filings and prosecution efforts of pending Company patents that relate to Ultragenyx chemistry. Since the Company’s deliverables under the agreement are considered a single unit of accounting, the payment consideration was added to the unamortized portion of the upfront signing fee and is being recognized systematically, on a straight-line basis, over the remainder of the period that the research and development services are expected to occur. During the fourth quarter of 2018, Ultragenyx extended the exclusivity on a specified number of reserved targets for an additional year with an annual reserve target list maintenance fee. This extension fee was deferred and will be recognized on a straight-line basis over the one-year exclusivity period. Total deferred revenue as of December 31, 2018 and December 31, 2017 for Ultragenyx was $2.7 million and $5.8 million, respectively.

The Company recognized revenue for Ultragenyx of $6.8 million and $5.6 million during the years ended December 31, 2018 and 2017, respectively. The revenue recognized included labor and expense reimbursements of $2.3 million and $3.7 million for the years ended December 31, 2018 and 2017, respectively, with the remaining revenue representing the amortized portion of the upfront fee on the arrangement.

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Collaboration Partner — Takeda

In 2016 the Company entered into a contract with Millennium Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Limited ("Takeda") to perform certain discovery and development of RNA medicines for treatment of nonalcoholic fatty liver disease (NASH). The agreement provided a non-exclusive license of the Company's technology to Takeda for the 18 month research program term. As part of the agreement, Takeda paid an upfront fee of $0.1 million upon contract execution and agreed to provide the Company with funding for the discovery and development costs. The Company concluded that the research funding, exclusivity and license fees were to be accounted for as a single unit of accounting and the upfront license fees were deferred and recognized as revenue over the same period as the initial research program term. In 2017, the Company and Takeda amended the agreement to extend the research program scope and term through December 20, 2018.

The amended agreement provided for $3.7 million in regularly scheduled research funding payments through 2018. The scheduled fees paid are contractually refundable to Takeda if unearned by the Company. As noted above, the agreement ended during December of 2018 in accordance with the contractually agreed upon research term.

On March 8, 2019, the Company entered into a Research Collaboration Agreement with Takeda for the purpose of designing, optimizing and manufacturing LUNAR-formulated mRNA Therapeutics. The Company recognized revenue from Takeda of $1.1 million and $1.4 million for the years ended December 31, 2018 and 2017, respectively. The revenue recognized includes expense reimbursements that are recognized as revenue when incurred as per the terms of the agreement and milestone payments. The Company is currently in negotiations with Takeda to potentially begin a new program with the intent for these remaining funds to be spent on additional workplans, resources and activities performed by Arcturus as part of the collaboration.

Collaboration Partner — CureVac

In January 2018, the Company entered into a Development and Option Agreement with CureVac, (the "Development and Option Agreement"). Under the terms of the Development and Option Agreement, the parties have agreed to conduct joint preclinical development programs once CureVac makes a payment to pull down a target on the basis of which CureVac is granted options for taking a license on pre-agreed license terms to develop and commercialize certain products incorporating the Company's patents and know-how related to delivery systems based on or incorporating lipid-mediated delivery systems (including the LUNAR® platform) (the "Arcturus LMD Technology"), and CureVac patents and know-how related to mRNA technology. Subject to certain restrictions, the parties will have an undivided one-half interest in the patents and know-how developed jointly by the parties during the course of the Development and Option Agreement. Pursuant to the terms of the Development and Option Agreement, CureVac will have a number of target options to co-develop from a reserved target list to enter into licenses under the Arcturus LMD Technology with respect to the development, manufacture and commercialization of licensed products (which can include products identified for development by the Company unless the Company is permitted by the terms of the Development and Option Agreement to place such products on a restricted list). A separate notice and fee will be required for each license agreement. If the target to which the license agreement relates is chosen by the parties for co-development under the Co-Development Agreement (which is defined below and discussed in the following paragraph) the license agreement will terminate as such programs will be covered under the Co-Development Agreement discussed below, and therefore CureVac will be given a credit for any exercise fees, milestone payments already paid and all other payments made in relation to the license agreement towards future such payments incurred with respect to future licenses under the Arcturus LMD Technology. Pursuant to a May 2018 amendment to the Development and Option Agreement (which was amended and restated on September 28, 2018), the Company increased the

number of targets available to CureVac under the Development and Option Agreement and agreed upon the license forms to be executed upon selection of the targets by CureVac.

Concurrently with the Development and Option Agreement, the Company entered into a Co-Development and Co-Commercialization Agreement (the "Co-Development Agreement"). Under the terms of such agreement, the parties will collaborate to develop and commercialize mRNA-based products for treating ornithine transcarbamylase ("OTC") deficiency, incorporating CureVac's mRNA technology, the Company's mRNA technology and the Arcturus LMD Technology. The overall collaboration with CureVac was managed by a joint steering committee. The parties also have the option to co-develop two mRNA programs for CureVac and one mRNA program for the Company that are not included on the target escrow list. All costs incurred from the Co-Development Agreement will be shared equally by the Company and CureVac, and any costs incurred by the Company in excess of CureVac will be divided evenly and recognized as revenue. The Company recognized $3.3 million of collaboration revenue related to the Co-Development Agreement as of December 31, 2018.

The Company concluded that the contracts should be accounted for on a combined basis due to their being negotiated and signed concurrently as well as the interoperability between the two agreements, and that the research and development activities, exclusivity, license fees, governance and reserve target rights were to be accounted for as a single unit of accounting and the upfront license fees of $5.0 million were deferred and recognized as revenue over the eight-year research program period. Further, the Company concluded that the options granted to CureVac are substantive and are to be evaluated as a separate arrangement and not a deliverable of the original arrangement since the option is at the sole election of the customer and due to the fact that the exercise price for the option is reasonable in comparison to other payments in the arrangement. Total deferred revenue as of December 31, 2018 was $4.4 million under the Development and Option Agreement. The Company recognized revenue from CureVac under both agreements of $4.4 million for the year ended December 31, 2018. The revenue recognized included labor and expense reimbursements of $3.8 million for the year ended December 31, 2018, with the remaining revenue representing the amortized portion of the upfront fee under the Development and Option Agreement.

On February 11, 2019, the Company announced the termination of the obligations of CureVac under the Co-Development Agreement, effective 180 days from February 5, 2019 and the re-assumption by the Company of the worldwide rights thereto. Arcturus will reassume 100% global rights for its flagship asset, clinical development candidate ARCT-810, a messenger RNA (mRNA) drug to treat OTC deficiency. ARCT-810 was previously subject to equal cost sharing between Arcturus and CureVac under the Co-Development Agreement. CureVac elected not to continue its obligations for the preclinical development of ARCT-810 under and pursuant to the terms of the agreement.

Pursuant to the terms of the Co-Development Agreement, CureVac is obligated to continue to fund its share of the preclinical expenses for the OTC program until August of 2019.

Other Collaboration Agreements

The Company entered into several other smaller agreements and recorded revenue and deferred revenue consistently with the revenue recognition practices described in the significant accounting policies footnote. The total revenue of $2.2 million from other smaller agreements was primarily related to a Research and Exclusive License Agreement with Synthetic Genomics, Inc. ("SGI") which the Company entered into during the fourth quarter of 2017. Under the agreement, the Company granted SGI an exclusive license for the Arcturus LMD Technology to research, develop and sell products for diseases excluding all respiratory disease viruses other than influenza. Revenue related to this agreement is made up of labor reimbursements and sublicense revenue. The sublicense revenue is calculated as a percentage of all cash payments received by SGI from any sublicense

for a LUNAR product, in the mid 10% to 20% range, less payments made to third parties to obtain the right to practice intellectual property used to develop or necessary to make, use, or sell all or part of licensed LUNAR product. Under certain circumstances, the Company will be owed a percentage ranging from 5% to 10% of amounts received by SGI should they enter into agreements. Additionally, in order to maintain exclusive rights, SGI must achieve certain specified sublicense milestones or pay the Company annual exclusivity maintenance fees. As part of the agreement, SGI paid an upfront fee of $0.2 million upon contract execution which is creditable against any payments to Arcturus. Therefore, the upfront fee was fully deferred upon the receipt of funds. The Company recognized $1.4 million of labor reimbursement and sublicense revenue as of December 31, 2018.

The remaining revenue from smaller collaboration agreements primarily relates to the agreement with Providence Therapeutics, Inc. (“Providence”), a related party. Under this agreement, the Company recognized revenue of $0.6 million from amortization of an upfront payment, labor reimbursements, and out-of-pocket cost reimbursements. See Note 14 Related Party Transactions for further details of the Providence agreement.

NOTE 4. Short-term Investments

As of December 31, 2017, the Company’s short-term investments consisted of short-term bank deposits and marketable securities totaling $23.6 million. The balance of investments as of December 31, 2017 included bank deposits of $15.0 million with maturities of more than three months but less than one year as well as short-term deposits stated at cost which approximated market value. As of December 31, 2017, the Company’s short-term bank deposits bore interest at a weighted average annual interest rate of 1.6%. During 2018, all short-term bank deposits were liquidated.

There were no short-term investments as of December 31, 2018. The following is a summary of short-term investments at December 31, 2017:

	December 31, 2017			
(Dollars in thousands)	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Certificates of deposit	$ 1,462	$ —	$ —	$1,462
Corporate debt securities	7,149	—	(3)	7,146
Total	$ 8,611	$ —	$ (3)	$8,608

All short-term investments are held as available-for-sale and mature within twelve months of December 31, 2017.

NOTE 5. Fair Value Measurements

The Company establishes the fair value of its assets and liabilities using the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company established a fair value hierarchy based on the inputs used to measure fair value.

The three levels of the fair value hierarchy are as follows:

Level 1: Quoted prices in active markets for identical assets or liabilities.

Level 2: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly.

Level 3: Unobservable inputs in which little or no market data exists, and are therefore determined using estimates and assumptions developed by the Company, which reflect those that a market participant would use.

The carrying value of cash, restricted cash, short-term bank deposits, accounts receivable, accounts payable, and accrued liabilities approximate their respective fair values due to their relative short maturities.

As of December 31, 2018, all assets measured at fair value on a recurring basis consisted of cash equivalents which were classified within Level 1 of the fair value hierarchy. The following table presents the fair value hierarchy for assets measured at fair value on a recurring basis as of December 31, 2017 (in thousands):

	December 31, 2017			
	Fair value measurements using input type			
	Level 1	Level 2	Level 3	Total
Cash equivalents	$2,024	$ —	$ —	$ 2,024
Certificates of deposit	—	1,462	—	1,462
Corporate debt securities	—	7,146	—	7,146
Total financial assets	$2,024	$8,608	$ —	$10,632

The fair value of certain financial instruments was measured and classified within Level 1 of the fair value hierarchy based on quoted prices. Certain financial instruments classified within Level 2 of the fair value hierarchy include the types of instruments that trade in markets that are not considered to be active, but are valued based on quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency.

NOTE 6. Reverse Merger with Alcobra Ltd.

As described in Note 1 “Organization,” the reverse merger completed between Arcturus and Alcobra Ltd. was accounted for as an issuance of shares by the Company for the net assets of Alcobra Ltd., accompanied by a recapitalization. Arcturus was considered the acquirer for accounting and financial reporting purposes and acquired the assets and assumed the liabilities of Alcobra Ltd. Arcturus gained control of the combined company after the merger. The annual consolidated financial statements of the Company reflect the operations of the acquirer for accounting purposes together with a deemed issuance of shares, equivalent to the shares held by the former stockholders of the legal acquirer and a recapitalization of the equity of the accounting acquirer. The annual consolidated financial statements include the accounts of the Company since the effective date of the reverse capitalization and the accounts of Arcturus Therapeutics, Inc. since inception.

Arcturus Therapeutics Ltd. and its Subsidiaries
Notes to Consolidated Financial Statements — Continued

The following summarizes the estimated fair value of the assets and liabilities acquired at November 15, 2017, the date of the merger:

(in thousands)	
Cash and cash equivalents	$ 2,032
Restricted cash	179
Short-term investments	34,188
Prepaid and other assets	434
Property, plant and equipment — held for sale	29
Intangible asset-held for sale	590
Total assets acquired	37,452
Accounts payable and accrued expenses	(1,906)
Net assets acquired	$35,546

The estimated fair value of total considerations paid was $40,841,000 based on the shares and options of Alcobra Ltd. outstanding on the merger date as adjusted per the merger agreement of 3,997,000 multiplied by the closing price of $10.22 on the date of the merger. The excess of the fair value of the consideration paid over the fair value of the net assets acquired as detailed above was $5,295,000, which was recorded as a charge to additional paid-in capital in the equity section of the consolidated balance sheet. The Company also incurred direct merger-related costs totaling $1,734,000, which offset proceeds received from the transaction and were recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

Assets acquired in the merger included an intangible asset consisting of in-process research and development for proprietary drug technology called ADAIR. At the closing date of the reverse merger, the Company entered into an agreement with Amiservice to which the Company agreed to transfer certain intellectual property related to ADAIR in exchange for a minority equity stake in a company to be formed by Amiservice for the purpose of acquiring the ADAIR assets. The Company determined that the asset met the classification criteria as held for sale in accordance with related accounting guidance when acquired and remained held for sale at December 31, 2017. To determine the fair value of the ADAIR asset, the Company utilized an independent valuation consultant who valued the asset using a market approach valuation method. In conjunction with this valuation, management judgment was required to forecast the occurrence of future events that would trigger the closing of the ADAIR sale agreement.

At the end of the second quarter of 2018, the Company completed the sale of its intangible assets related to the ADAIR technology (Note 2).

NOTE 7. Balance sheet details

Accrued liabilities consisted of the following as of December 31, 2018 and December 31, 2017.

	December 31,	
(in thousands)	2018	2017
Accrued compensation	$ 974	$1,812
Refundable fees received	2,259	—
Other accrued liabilities	674	981
Total	$3,907	$2,793

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Notes to Consolidated Financial Statements — Continued

NOTE 8. Property and Equipment, Net

Property and equipment, net consisted of the following:

(in thousands)	December 31, 2018	2017
Research equipment	$ 2,711	$1,620
Computers and software	200	97
Office equipment and furniture	527	255
Leasehold improvements	34	44
Total	3,472	2,016
Less accumulated depreciation and amortization	(1,497)	(967)
Property and equipment, net	$ 1,975	$1,049

Depreciation and amortization expense was $582,000 and $410,000 for the years ended December 31, 2018 and December 31, 2017, respectively.

NOTE 9. Debt

Long-term debt with Western Alliance Bank

On October 12, 2018, the Company entered into a Loan and Security Agreement with Western Alliance Bank whereby the Company received gross proceeds of $10.0 million under a long-term debt agreement (the “Loan”). The Loan has a maturity date of October 1, 2022 and carries interest at the U.S. prime rate plus 1.25%. The loan has an interest-only period of 19 months, which could be extended by an additional 6 months if certain conditions are met, followed by an amortization period of 30 months, or 24 months if the interest-only period is extended. As of December 31, 2018, the Company estimated that the interest-only period will be 19 months, followed by an amortization period of 30 month.

The Company paid a loan origination fee of $128,000 which was recorded as a debt discount and is being accreted over the term of the Loan. In addition, the Company is required to pay a fee of $350,000 upon certain change of control events.

Upon maturity or prepayment, the Company will be required to pay a 3% fee, or a 2% fee if the U.S. Food and Drug Administration accepts certain Investigational New Drug (“IND”) applications prior to maturity. Because acceptance of an IND is outside of the Company’s control, management estimated that the Company will be liable for a fee of 3% of the principal balance, or $300,000 upon repayment or maturity, and such fee is accreted to the debt balance using the effective interest method over the term of the Loan.

The Loan is collateralized by all of the assets of the Company, excluding intellectual property, which is subject to a negative pledge. The Loan contains customary conditions of borrowing, events of default and covenants, including covenants that restrict the Company’s ability to dispose of assets, merge with or acquire other entities, incur indebtedness and make distributions to holders of the Company’s capital stock. In addition, the Company is required to maintain at least 50% of its deposit and investment accounts, or $20 million, whichever is lower, with the Western Alliance Bank.

The Loan also includes covenants which include the Company’s (1) nomination of a clinical candidate by December 31, 2018, which the Company is in compliance with, and (2) submission of a clinical candidate for Investigational New Drug application (“IND”), made to the U.S. Food and Drug Administration by

December 31, 2019 and have it approved by January 31, 2020, provided that, if the Company has received net cash proceeds from sale, on or after October 12, 2018, of the Company's equity securities in an amount of not less than $15,000,000, then the IND submission date shall be extended to May 31, 2020 and the approval date shall be extended to June 30, 2020.

Should an event of default occur, including the occurrence of a material adverse effect, the Company could be liable for immediate repayment of all obligations under the Loan. As of December 31, 2018, the Company is in compliance with all covenants and conditions of the Loan.

As of December 31, 2018, the outstanding long-term debt balance was $9.9 milllion, inclusive of $28,000 of accretion of the final payment and net of the unamortized debt discount of $117,000.

Principal payments, including the final payment due at repayment, on the long-term debt are as follows as of December 31, 2018:

Year Ending December 31,	
2019	$ —
2020	2,666,667
2021	4,000,000
2021	3,633,333
Total	10,300,000

Convertible Promissory Notes

On November 15, 2017 and in connection with the merger, holders of all of the Company's convertible promissory notes that were issued in the second quarter of 2017 converted $5,795,000 of principal value and $162,000 of accrued interest into 616,824 Ordinary Shares at an average conversion rate of $10.19 per share. Additionally, the Company recognized additional expense of $348,000 as a result of the beneficial conversion feature received by the noteholders upon settlement per terms of the amended note agreements, which was charged to finance expense included in the consolidated statements of operations and comprehensive loss.

The Company recognized interest expense related to its long-term debt of $186,000 and $150,000 during the years ended December 31, 2018 and 2017, respectively.

NOTE 10. Shareholders' Equity

Ordinary Shares

Merger and reverse stock split

The Company completed the merger with Alcobra Ltd. on November 15, 2017 as described in Note 6 to the consolidated financial statements. In connection with the merger, all outstanding shares of Arcturus Therapeutics, Inc. were exchanged for the Company's ordinary shares at a rate of 0.293 ordinary shares of the Company's stock for each share of Arcturus Therapeutics, Inc. common stock.

Also on November 15, 2017 and prior to and in connection with the merger, Alcobra Ltd. effected a 1-for-7 reverse stock split of ordinary shares and changed ordinary shares authorized to 30,000,000 shares. All historical information presented herein has been retroactively restated to reflect the effect of the merger exchange ratio, reverse stock split and change to the authorized number of ordinary shares in accordance with Accounting Standards Codification Topic 260, *"Earnings Per Share"*.

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Notes to Consolidated Financial Statements — Continued

Restricted Ordinary Shares

In March 2013, the founders of the Company purchased 2,783,686 ordinary shares of stock for $0.0068 per share. Of the shares purchased, 1,538,353 were subject to a repurchase option whereby the Company has an option for two months after date of termination of service to repurchase any or all of the unvested shares at the original purchase price per share. The repurchase option shall be deemed to be automatically exercised by the Company as of the end of the two-month period unless the Company notifies the purchaser that it does not intend to exercise its option. The shares will be vested (1) 25% after obtaining suitable siRNA license; (2) 25% after *in vivo* proof-of-concept achieved; (3) 25% after a regulatory agency new drug application (such as an Investigational New Drug application) is filed and accepted by the applicable regulatory agency; and (4) 25% after human biological proof-of-concept is achieved. The Company met the first two milestones during 2013 and 2014 leaving an unvested balance of 769,176 ordinary shares. In 2017, the ordinary shares purchase agreements were amended to clarify vesting conditions and also to accelerate the vesting of 146,510 ordinary shares resulting in a modification expense of $1,495,000 as of December 31, 2017. As of December 31, 2018 and 2017, there were 622,667 ordinary shares unvested and subject to the repurchase option.

Warrants

Warrants were issued in connection with the issuance of the Company's preferred stock. In 2017 and in conjunction with the merger, all 192,647 of the outstanding warrants were exercised for 188,980 Ordinary Shares (after subtraction of shares for net exercise, when selected). The Company received proceeds of $160,000 in conjunction with the warrant exercises in 2017.

Net Loss per Share

Dilutive securities at December 31, 2018 that were not included in the calculation of diluted net loss per share for the year ended December 31, 2018 as they were anti-dilutive totaled 94,000. Dilutive securities that were not included in the calculation of diluted net loss per share because they were anti-dilutive totaled 3,057,000 potential shares at December 31, 2017.

For the years ended December 31, 2018 and 2017, the calculation of the weighted-average number of shares outstanding excludes both unvested restricted ordinary shares of 622,667 and shares held in treasury of 43,000. In addition, for only the year ended December 31, 2017, the calculation of weighted-average number of shares outstanding excludes 79,000 shares which were issued upon the early exercise of share options and subject to future vesting.

NOTE 11. Share-Based Compensation

Arcturus Therapeutics, Inc. had one stock compensation plan prior to the merger, the 2013 Equity Incentive Plan (the "2013 Plan") which provides for the granting of options, warrants, restricted stock awards, restricted stock units, and other equity-based compensation to the Company's directors, employees and consultants. In connection with the merger and as required in the 2013 Plan, all outstanding options in the 2013 Plan converted into options to purchase Alcobra Ltd.'s Ordinary Shares, as renamed Arcturus Therapeutics Ltd., and the applicable share amounts and exercise prices were adjusted to reflect the exchange ratio. The 2013 Plan has been extinguished and no additional grants shall be made from the 2013 Plan. Options granted under the 2013 Plan generally expire ten years from the date of grant. There were 38,751 shares available for future issuance under the 2013 Plan at December 31, 2018.

Prior to the merger, Alcobra Ltd. granted options to officers, directors, advisors, management and other key employees through the 2010 Incentive Option Plan (the "2010 Plan"). Substantially all options that were

outstanding under the 2010 Plan became fully vested upon the closing of the merger. The value of these options was included as a component of the purchase price recorded in conjunction with the merger. The number of shares subject to and the exercise prices applicable to these outstanding options were adjusted in connection with the 1- for- 7 reverse share split. Options granted under the 2010 Plan generally expire ten years from the date of grant. Upon merger, the 2013 Plan was assumed by the 2010 Plan. The Company generally issues new shares upon option exercise. There were 94,001 shares available for future issuance under the 2010 Plan as of December 31, 2018; however, the Company does not intend to issue additional shares under the 2010 Plan.

In August 2018, the Company adopted the 2018 Omnibus Equity Incentive Plan ("2018 Plan"). Under the 2018 Plan, the Company is authorized to issue up to a maximum of 1,100,000 ordinary shares pursuant to the exercise of incentive share options or other awards provided for therein. In August 2018, the Company issued a certain number of options to purchase Ordinary shares to a group of employees as well as options to purchase a total of 220,000 Ordinary Shares to its executives. The Company also issued options to purchase a total of 130,000 Ordinary Shares to the non-executive members of the Company's board of directors. As of December 31, 2018, there were 470,000 shares available for future issuance under the 2018 Plan.

Share Options

The following table presents the weighted-average assumptions used in the Black-Scholes valuation model by the Company in calculating the fair value of share options granted:

	For the Year Ended December 31,	
	2018	2017
Expected life (in years)	6.07	7.3
Expected volatility	73.3%	76.4%
Expected dividend yield	— %	— %
Risk-free interest rate	2.77%	1.87%
Grant date weighted average fair value	$ 5.38	$ 7.94

The following table summarizes the Company's share option activity for the year ended December 31, 2018:

	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding — December 31, 2017	344,055	$ 8.70		
Granted	1,046,931	$ 8.13		
Exercised	(62,224)	$ 5.34		$ 218
Forfeited/cancelled	(139,329)	$ 16.92		
Outstanding — December 31, 2018	1,189,433	$ 7.41	9.11	$ 301
Exercisable — December 31, 2018	280,782	$ 5.77	7.53	$ 255
Exercisable and expected to vest — December 31, 2018	1,189,433	$ 7.41	9.11	$ 301

At December 31, 2018, the total unrecognized compensation cost of $4.4 million will be recognized over the weighted-average remaining service period of approximately 3.1 years. The fair value of the options vested during the years ended December 31, 2018 and 2017 was $972,000 and $669,000, respectively.

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Notes to Consolidated Financial Statements — Continued

Certain options granted were exercised prior to vesting, and are subject to repurchase by the Company at the lower of the original issue price or fair value and will vest according to the respective option agreement. As of December 31, 2017, 35,595 options were exercised but still subject to future vesting. No shares remained subject to repurchase as of December 31, 2018.

Share-based compensation expenses included in the Company's statements of operations and comprehensive loss for the years ended December 31, 2018 and 2017 were:

	For the Year Ended December 31,	
(in thousands)	2018	2017
Research and development	$ 566	$ 38
General and administrative	693	2,132
Total	$ 1,259	$ 2,170

Share-based compensation expense for the year ended December 31, 2017 includes $1,495,000 of expense related to a modification of a restricted Ordinary Shares agreement as discussed in Note 10.

During 2017, the Company granted options for 58,600 shares to two board members at an exercise price below fair value at the grant date. The awards were subject to performance conditions based on closing the reverse merger with Alcobra Ltd. and execution of a facility lease. All of the options vested during 2017, and related expense of $568,000 is included in general and administrative expense for the year ended December 31, 2017 related to the awards.

NOTE 12. Income Taxes

A reconciliation of loss before income taxes for domestic and foreign locations for the years ended December 31, 2018 and 2017 is as follows:

	For the Year Ended December 31,	
(In thousands)	2018	2017
United States	$ (21,604)	$ (10,820)
Foreign	(181)	(81)
Total loss before income taxes	$ (21,785)	$ (10,901)

The Company accounts for income taxes in accordance with ASC 740-10, *Accounting for Uncertainty in Income Taxes*. The impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more likely than not to be sustained upon audit by the relevant taxing authority. An uncertain tax position will not be recognized if it has less than 50% likelihood of being sustained.

Arcturus Therapeutics Ltd. and its Subsidiaries
Notes to Consolidated Financial Statements — Continued

A reconciliation of income tax expense for the years ended December 31, 2018 and 2017 is as follows (in millions):

	December 31, 2018	2017
Beginning balance of unrecognized tax benefits	$ 0.4	$ 0.4
Settlement of prior period tax positions	—	—
Increase for prior period tax positions	—	—
Increase for current period tax positions	—	—
Ending balance of unrecognized tax benefits	$ 0.4	$ 0.4

Included in the balance of unrecognized tax benefits at both December 31, 2018 and 2017 is $0.4 million that could impact the Company's effective tax rate, if recognized, subject to a valuation allowance. None of the unrecognized tax benefits currently impact the Company's effective tax rate due to the full valuation allowance the Company has recorded against its deferred tax assets.

The Company is subject to taxation and files income tax returns in the United States, California and Israel. Currently, no historical years are under examination. The Company's tax years from 2013 to date are subject to examination by the Israeli, U.S. and state taxing authorities due to the carryforward of unutilized net operating losses and research and development credits. The Company's policy is to recognize interest expense and penalties related to income tax matters as income tax expense. As of December 31, 2018, there are unrecognized tax benefits of $0.2 million and $0.2 million for the United States and California, respectively. There was no tax related interest or penalties recognized for the years ended December 31, 2018 and 2017.

The Company does not anticipate any material changes to its unrecognized tax benefits within the next twelve months.

The significant components of deferred income taxes at December 31, 2018 and 2017:

(in thousands)	December 31, 2018	2017
Deferred tax assets:		
Net operating loss	$ 8,399	$ 25,101
Tax credits	35	35
Accrued liabilities	261	227
Deferred revenue	1,713	1,162
Depreciation and amortization	46	—
Share-based compensation	85	90
Total gross deferred tax assets	10,539	26,615
Deferred tax liabilities:		
Depreciation and amortization	—	(96)
Valuation allowance	(10,539)	(26,519)
Net deferred tax asset	$ —	$ —

The Company has established a valuation allowance against net deferred tax assets due to the uncertainty that such assets will be realized. The Company periodically evaluates the recoverability of the deferred tax assets. At such time as it is determined that it is more likely than not that deferred tax assets will be realizable, the valuation allowance will be reduced.

Arcturus Therapeutics Ltd. and its Subsidiaries
Notes to Consolidated Financial Statements — Continued

At December 31, 2018, the Company had federal and state net operating losses, or NOL, carryforwards of approximately $33.2 million and $30.2 million, respectively. The federal NOL carryforwards begin to expire in 2034, and the state NOL carryforwards begin to expire in 2034. The Company has foreign NOL carryforwards of approximately $89.0 million that do not expire and can be carried forward indefinitely. Due to the Company's recent plan of the Redomiciliation, it is more likely than not that the foreign NOL will not be realized. As a result, the Company has removed the foreign NOL carryforwards from its deferred tax asset schedule and recorded a corresponding decrease to its valuation allowance beginning January 1, 2018.

Excluded from the deferred tax assets for the net operating losses are pre-acquisition Alcobra Inc. and Alcobra Ltd. federal and foreign losses of $0.3 million and $20.4 million, respectively. The Company does not believe these losses will be available to use in the future due to limitations under IRC Section 382, lack of operations in Israel where the NOLs were generated and contemplated restructuring.

At December 31, 2018, the Company had federal and state research and development credit carryforwards of approximately $0.2 million and $0.2 million, respectively. The federal credit carryforwards begin to expire in 2033, and the state credits carry forward indefinitely.

The Company has also incurred research and development expenses of $17.0 million and $15.9 million for the years ended December 31, 2018 and 2017, respectively. The Company believes that a portion of these expenditures will yield additional federal and California tax credits; however, the potential credits under the tax laws have not yet been calculated.

Pursuant to Internal Revenue Code of 1986, as amended (the Code) Sections 382 and 383, annual use of the Company's federal and California net operating loss and research and development credit carryforwards may be limited in the event a cumulative change in ownership of more than 50% occurs within a three-year period. The Company has not completed a Code Section 382 analysis regarding the limitation of net operating loss carryforwards and other tax attributes. There is a risk that changes in ownership have occurred since Company's formation. If a change in ownership were to have occurred, the NOL carryforwards and other tax attributes could be limited or restricted. If limited, the related asset would be removed from the deferred tax asset schedule with a corresponding reduction in the valuation allowance. Due to the existence of the valuation allowance, limitations created by future ownership changes, if any, related to the Company's operations in the U.S. will not impact the Company's effective tax rate.

A reconciliation of the federal statutory income tax rate to the Company's effective income tax rate is as follows:

	For the Year Ended December 31,	
	2018	2017
Federal statutory income tax rate	21.0%	34.0%
State income taxes, net of federal benefit	5.3%	4.4%
Foreign rate differential	(1.3%)	0.2%
Share-based compensation	(0.2%)	— %
Tax Cuts and JOBS Act	— %	(22.0%)
Change in tax rate	— %	(8.3%)
Change in valuation allowance	(20.7%)	1.8%
Other	(3.0%)	(1.8%)
Permanent differences	(1.1%)	(8.3%)
Provision for income taxes	— %	— %

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Notes to Consolidated Financial Statements — Continued

The Tax Cuts and Jobs Act (the Act) was enacted in the U.S. on December 22, 2017. The Act reduced the corporate tax rate to 21% from 35% rate, required companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and created new taxes on certain foreign-sourced earnings. In 2017, the Company recorded provisional amounts for certain enactment-date effects of the Act by applying the guidance in SAB 118 because it had not yet completed its enactment-date accounting for these effects.

SAB 118 measurement period

The Company applied the guidance in SAB 118 when accounting for the enactment-date effects of the Act in 2017. At December 31, 2017, the Company had not completed its accounting for all of the enactment-date income tax effects of the Act under ASC 740, Income Taxes. At December 31, 2018, the Company completed its accounting for all of the enactment-date income tax effects of the Act. As further discussed below, during 2018, the Company did not recognize adjustments to the provisional amounts recorded at December 31, 2017.

As of December 31, 2017, the Company remeasured certain deferred tax assets and liabilities based on the rates at which they were expected to reverse in the future (which was generally 21%), by recording a provisional amount of $2.4 million, which was fully offset by a valuation allowance of the same amount. Upon further analysis of certain aspects of the Act and refinement of its calculations during the 12 months ended December 31, 2018, the Company found no other adjustments were necessary.

NOTE 13. Commitments and Contingencies

Cystic Fibrosis Foundation Therapeutics Funding agreement

The Company has received royalty bearing grants sponsored by Cystic Fibrosis Foundation Therapeutics, Inc. (“CFFT”). Should the awards result in a successful product, the Company will pay CFFT a specified payment amount in installments following commercialization based on a formula that is six times the total award amount, plus a payment equal to the awarded payments, within sixty days after aggregate net sales of the product exceed certain thresholds. Further, in the event of a license, sale or other transfer of the product or the Company’s development program technology (including a change of control transaction), the Company will pay CFFT a percentage of such transfer payments actually received by the Company or the Company’s shareholders (subject to a royalty cap). As of December 31, 2018, the Company has received $0.5 million in grants and has not had a successful product utilizing CFFT grants.

Operating Leases

The Company leases office and lab space for its corporate headquarters in San Diego, California under a non-cancelable operating lease. The initial lease term ended February 2018 and had monthly rental payments with escalations during the term of the lease.

In October 2017, the Company entered into a new lease for office space adjacent to its previously occupied headquarters. The commencement of the lease began in March 2018 and the lease extends for approximately 84 months from the commencement date. Monthly rental payments are due under the lease and there are escalating rent payments during the term of the lease. The Company is also responsible for its proportional share of operating expenses of the building and common areas. In conjunction with the new lease, the Company will receive free rent for four months and received a tenant improvement allowance of $74,000. The lease may be extended for one five year period at then current market rate with annual escalations. The Company entered into an irrevocable standby letter of credit with the landlord for security of $96,000 upon executing the lease which is included (along with additional funds required to secure the letter of credit) in the balance of non-current restricted cash as of December 31, 2018.

Arcturus Therapeutics Ltd. and its Subsidiaries
Notes to Consolidated Financial Statements — Continued

For operating leases, minimum lease payments, including minimum scheduled rent increases, are recognized as rent expense on a straight-line basis over the lease term. Leasehold improvement incentives paid to the Company by the landlord are recorded as a deferred rent and amortized as a reduction of rent expense over the lease term. Rent expense totaled $1.1 million and $334,000 for the years ended December 31, 2018 and 2017, respectively.

Future minimum payments under leases and lease commitments with initial terms greater than one year were as follows at December 31, 2018 *(in thousands)*:

2019	$1,268
2020	1,277
2021	1,315
2022	1,350
2023	1,390
Thereafter	1,745
Total	$8,345

Note 14. Related Party Transactions

During 2016, the Company entered into a Research Collaboration and License Agreement with a related party, Providence, whose CEO and President is also a shareholder of the Company, to identify and optimize microRNA modulators and/or mimetics for the treatment of neoplastic diseases. In April 2017, the Providence Agreement was amended to include mRNA for the treatment of neoplastic disease. In July 2018, the Providence Agreement was amended and restated to cover brain neoplasms, breast neoplasms and ovarian neoplasms. Each party is responsible for their own research costs under the agreement, and Providence is responsible for all of the development costs through the completion of Phase 2 clinical trials. The Company is entitled to share in future product revenue of each product provided the Company shares in the product's post Phase 2 costs. Separately, Providence has agreed to pay for FTEs at a specified rate. For the years ended December 31, 2018 and 2017, the Company has recognized $0.6 million and $1.0 million, respectively, in revenue related to the amortization of the upfront payment and revenue related to the payment for FTEs and expense reimbursements. There were no outstanding accounts receivable balances related to this agreement as of December 31, 2018 and December 31, 2017. During the third quarter of 2017, the Company's ordinary share agreement for the President and CEO of Providence was modified to remove the vesting conditions of the original grant and the Company recognized $1.5 million in related stock compensation expense.

During May 2018, the Company agreed to reimburse professional fees related to the proxy incurred by Joseph Payne, President & CEO, Board of Director, and Padmanabh Chivukula, COO & CSO, totaling $1.4 million.

Note 15. Litigation

Previously Disclosed Litigation in Israel and California and California Arbitration

The Company, executive officers Joseph Payne (CEO) and Padmanabh Chivukula (COO and CSO) and certain former and current members of the Company's board of directors were party to now terminated lawsuits filed in Israel and California and an arbitration in California. These lawsuits and the arbitration emanated from disputes among certain of these parties in connection with actions taken by former board members to terminate the employment of Mr. Payne and Dr. Chivukula and lawsuits filed by Mr. Payne in response to these terminations.

Arcturus Therapeutics Ltd. and its Subsidiaries
Notes to Consolidated Financial Statements — Continued

Mr. Payne and Dr. Chivukula have been reappointed to their roles as CEO (Payne) and COO and CSO (Chivukula) with the Company and the Company entered into an Agreement and Release with its current officers and certain former directors and officers to terminate all of the then ongoing litigation in Israel and the Unites States and the arbitration that arose in connection with the terminations of Mr. Payne and Dr. Chivukula. Accordingly, all of the previously described lawsuits and the arbitration have been dismissed with prejudice.

Note 16. Subsequent Events

Effective January 1, 2019, the Company appointed Andrew Sassine as its Chief Financial Officer, whose employment terms are pending approval from the shareholders under the Israeli law. All compensation paid to Mr. Sassine from January 1, 2019 to the date of this filing is subject to refund to the Company should his appointment not be approved by shareholders.

On February 11, 2019, the Company announced its intention to initiate a process to redomicile from an Israeli limited company to a U.S. corporation. The final form and timing of the redomiciliation has not yet been finalized and the redomiciliation is subject to the approval of the shareholders. On February 11, 2019, the Company filed an application with the Tel Aviv District Court to approve the convening of a general shareholders meeting of the Company for the approval of the redomiciliation pursuant to Sections 350 and 351 of the Israeli Companies Law.

ANNEX A

EXCHANGE AGREEMENT

AGREEMENT

drawn up and signed on February 8, 2019

between: **ARCTURUS THERAPEUTICS LTD.**
Company number 514098995
of 58 Harakevet Street
Tel-Aviv, Israel
(**the "Israeli Company**")

of the first part;

and: **ARCTURUS THERAPEUTICS HOLDINGS INC.**
of 251 Little Falls Drive
New Castle County
The State of Delaware, 19808 United States
(**the "New Company**")

of the second part;

Whereas the Israeli Company is a public company incorporated in Israel and whose shares are listed for trading on the NASDAQ;

Whereas the New Company is a private company that was incorporated in the State of Delaware, United States, prior to the signing of this Agreement;

Whereas the Israeli Company wholly owns (100%) the American Company (as defined hereunder);

Whereas the New Company was incorporated for the designated purpose of implementing the share exchange that is the subject of this Agreement, has not yet issued any of its shares and is not engaging in, and has not engaged in, any business and/or other activity since the day of its incorporation, other than for the purposes of this Agreement;

Whereas the parties desire to engage in this Agreement for the purpose of implementing a reorganization proceeding, by way of an arrangement pursuant to sections 350 and 351 of the Companies Law, under which the Option-holders of the Israeli Company and the Shareholders of the Israeli Company shall receive, in lieu of their holdings of the Israeli Company Options and Shares, with shares and options for shares of the New Company, and furthermore, the American Company's shares held by the Israeli Company shall be transferred to the New Company, all as specified in this Agreement;

Whereas the consummation of the transaction that is the subject of this Agreement is subject to the receipt of the Court's approval, as well as the receipt of the additional approvals specified in this Agreement;

Whereas the parties desire to prescribe and define in the provisions of this Agreement all legal relations between them in relation to all matters pertaining to the execution of the exchange of the Israeli Company Options and Shares, the transfer of the American Company's shares to the New Company, as well as in relation to all other matters specified in this Agreement, all being in conformity with and subject to the provisions of this Agreement;

wherefore the parties agree and stipulate as follows:

1. **Recitals and definitions**

1.1 The recitals to this Agreement constitute an integral part thereof.

1.2 The clause headings are solely for reference purposes and may not be used for any other purpose, including for the purpose of interpreting This Agreement.

1.3 In This Agreement, the following terms shall have the definitions ascribed alongside them:

(a) **the "Consideration Options"** – Up to 1,658,183 options of the New Company, the terms of which shall be identical to those of the Israeli Company Options (*mutatis mutandis*) and which shall be issued to the Optionholders, pursuant to the terms of this Agreement, and which shall constitute the full consideration in respect of the Israeli Company Options, which shall be voided on the Consummation Date;

(b) **the "Court"** – The competent court in Israel to deliberate the Arrangement;

(c) **the "Shareholders of the Israeli Company"** – The holders of shares of the Israeli Company as they shall be on the Record Date;

(d) **the "Israeli Company Options"** – Up to 1,658,183 options to purchase shares of the Israeli Company, whereby each option vests the holder thereof with the right to exercise it for one share of the Israeli Company;

(e) **the "Application"** – Application for approval of the Arrangement;

(f) **the "Arrangement"** – Arrangement pursuant to sections 350 and 351 of the Companies Law, under which that stated hereunder in clause 2 shall be approved;

(g) **the "American Company"** – Arcturus Therapeutics Inc., which is a private company incorporated and registered in the State of Delaware, United States, and wholly owned (100%) by the Israeli Company;

(h) **the "Tax Ruling"** – A pre-ruling by the Israel Tax Authority regarding the taxation and withholding tax arrangements that shall apply in respect of a sale of the Israeli Company's shares and the Israeli Company Options in consideration of the Consideration Shares and the Consideration Options, voiding of the Israeli Company Options and in respect of the transfer of the American Company's shares from the Israeli Company to the New Company;

(i) **the "Deadline for Fulfilling the Suspending Conditions"** – May 31, 2019, unless extended as stated hereunder in clause 7.4;

(j) **the "Record Date"** – The date determining eligibility to receive the Consideration Shares, which shall be the date to be specified in the Court ruling regarding approval of the Arrangement;

(k) **the "Shares Being Purchased"** – Up to 11,139,723 ordinary shares of NIS 0.07 each of the Israeli Company, which constitute on the Consummation Date 100% of the Israeli Company's issued and paid-up share capital, being Free and Clear, which shall be purchased by the

			New Company from the Shareholders of the Israeli Company in consideration of the Consideration Shares, in conformity with the terms of This Agreement;
(l)	**the "Suspending Conditions"**	–	All of the suspending conditions specified hereunder in clause 7;
(m)	**the "Consideration"**	–	As defined hereunder in clause 3;
(n)	**the "Companies Law"**	–	The Israeli Companies Law, *5759* – 1999, and the regulations enacted pursuant thereto;
(o)	**the** "**Securities Law**"	–	The Israeli Securities Law, *5728* – 1968, and the regulations enacted pursuant thereto;
(p)	**the "Consummation Date"**	–	The date on which the Arrangement shall be completed according to the date to be stipulated by the Court;
(q)	**the "Option-holders"**	–	The holders of the Israeli Company Options as they shall be on the Consummation Date;
(r)	**the** "**Israeli Company Options and Shares**"		the Shares Being Purchased and the Israeli Company Options
(s)	**the "Consideration Shares"**	–	Up to 11,139,723 shares of common stock, par value USD 0.001 per share, of the New Company, which shall constitute on the Consummation Date 100% of the issued and outstanding share capital of the New Company, being Free and Clear, which shall be issued to the Shareholders of the Israeli Company in consideration of the Shares Being Purchased, in conformity with the terms of this Agreement, and which shall constitute the full consideration in respect of the Shares Being Purchased;
(t)	**the "Form S-4 Registration Statement"**	–	the registration statement on Form S-4 to be filed with the SEC by the New Company registering the public offering and sale of the Consideration Shares to the Shareholders of the Israeli Company, as said registration statement may be amended prior to the time it is declared effective by the SEC.
(u)	"**NASDAQ**"	–	The Nasdaq Global Market stock exchange in the United States (National Association of Securities Dealers Automated Quotations);
(v)	"**Free and Clear**"	–	Free and clear of any encumbrance, pledge, attachment, debt, liability, lien, arrangement, blocking, hypothecation, right of first refusal, preferential right, right of offer, tag-along right, purchase option, lawsuit, demand, claim or any third-party right of any kind whatsoever other than any restrictions imposed by applicable United States securities laws and regulations;
(w)	**the "Interim Period"**	–	The period between the signing date of this Agreement and the Consummation Date;
(x)	**the "Companies Regulations"**	–	The Israeli Companies Regulations (Application for Settlement or Arrangement), *5762* – 2002;
(z)	**the "SEC"**	–	The United States Securities and Exchange Commission.

2. **The Arrangement**

Subject to the provisions of this Agreement and the fulfillment of the Suspending Conditions in their entirety, the following operations shall be carried out simultaneously and together on the Consummation Date:

2.1 All of the Shares Being Purchased and the Israeli Company Options shall be transferred to the New Company, so that all of the Israeli Company's issued and paid-up share capital shall be held by the New Company and, as a result, the Israeli Company shall become a private subsidiary of the New Company.

2.2 The New Company shall issue the Consideration Shares and the Consideration Options to the Shareholders of the Israeli Company and to the Option-holders, according to their holdings of Israeli Company Options and Shares on the Record Date, such that one share out of the Consideration Shares shall be issued against every one share out of the Shares Being Purchased that shall be transferred to the New Company (exchange on a one-for-one basis) and one option out of the Consideration Options shall be issued against every one options out of the Israeli Company Options. Consequently, all of the New Company's issued and outstanding share capital shall be held by the Shareholders of the Israeli Company.

2.3 The Consideration Shares shall be listed for trading on the NASDAQ.

2.4 The Israeli Company shall void all options existing at that time in its equity.

2.5 The New Company shall issue the Consideration Options to the Option-holders.

2.6 The Israeli Company shall transfer to the New Company by way of a dividend distribution in kind, all of its holdings of shares of the American Company, so that the American Company shall become a wholly-owned subsidiary of the New Company. The distribution may be executed, at any time close to or after the execution date of the transaction but no later than December 31, 2019, subject to Arcturus-Israel discretion, which can also elect not to execute such distribution.

2.7 In any instance whereby, subsequent to the Consummation Date, the performance of any additional action is required in order to carry out the provisions of this Agreement, each of the parties to this Agreement shall do everything reasonably necessary to that end, including by signing any document that might be required for that purpose.

3. **The Consideration**

On the Consummation Date, the New Company shall issue one share out of the Consideration Shares, as stated above in clause 2.2, against every one share out of the Shares Being Purchased that is held by the Shareholders of the Israeli Company on the Record Date; on the Consummation Date, the New Company shall issue one options out of the Consideration Options, as stated above in clause 2.5, against every one option out of the Israeli Company's Options that is held by the Option-holders (jointly: "**the Consideration**").

The New Company covenants that the Considerations Shares shall be issued to the Shareholders of the Israeli Company as fully paid-up shares, being Free and Clear, without any other restriction whatsoever on their tradability (including blocking), having equal rights for all intents and purposes, but *mutatis mutandis*, to the Shares Being Purchased.

4. **The parties' warrants and covenants**

4.1 The parties agree that, immediately following the completion of the Arrangement, the validity of all representations specified in this clause 4 shall expire and that no party shall have any claim or allegation against the other party and/or against officers therein and/or against its consultants in respect of the inaccuracy of all or a portion of the representations.

4.2 The Israeli Company warrants and covenants to the New Company that:

(a) It was duly incorporated according to the laws of the State of Israel, it is duly registered with the Israeli Companies Registrar, and there is no pending proceeding for its liquidation or striking from the records of the Companies Registrar.

(b) It is a public company pursuant to the Companies Law.

(c) Its shares are listed for trading on the NASDAQ.

(d) Its registered capital is NIS 2,100,000, divided into 30,000,000 ordinary shares of NIS 0.07 par value each, and its issued and paid-up share capital is 10,761,523 ordinary shares of NIS 0.07 par value each.

(e) There are 1,188,183 options in its equity, which were issued to officers, employees, consultants and service-providers currently and in the company's past, with each of them being exercisable for one share of the Israeli Company.

(f) Subject to the receipt of the approvals and the fulfillment of the Suspending Conditions, there is no prohibition, restriction or other obstacle, whether by law or by virtue of an agreement or commitment, to the Israeli Company's engagement in this Agreement and to the fulfillment of all of its covenants pursuant thereto in their entirety, and the transaction pursuant to this Agreement shall not contradict its incorporation documents.

(g) Apart from the Suspending Conditions, no third-party approval or consent is required for the fulfillment of its covenants pursuant to this Agreement, and the fulfillment of its covenants pursuant to this Agreement shall not constitute a breach of any of its obligations.

(h) It shall not perform any changes in its incorporation documents during the Interim Period, unless required for the purpose of executing this Agreement.

(i) It shall not perform any changes in its capital structure on the Record date and following it, unless required for the purpose of executing this Agreement.

(j) It shall not take action to perform any change of the capital structure of the American Company or any of its incorporation documents during the Interim Period, unless required for the purpose of executing this Agreement.

(k) The signatories of this Agreement on its behalf are authorized to legally obligate it by their signatures, and all resolutions have been passed that are required by law for the purposes of its engagement in this Agreement and the fulfillment of its covenants pursuant thereto, subject to the fulfillment of the Suspending Conditions.

4.3 The New Company warrants and covenants to the Israeli Company that:

(a) It was duly incorporated prior to the signing of this Agreement according to the laws of the State of Delaware, United States, it is duly registered and there is no pending proceeding for its liquidation or dissolution in the State of Delaware, United States.

(b) Its registered capital includes 40,000,000 shares, divided into 30,000,000 shares of common stock, USD 0.001 par value per share, and 10,000,000 shares of preferred stock, USD 0.001 par value per share.

(c) As at the signing date of this Agreement, it has not yet issued any shares and shall not issue any securities that are convertible or nonconvertible and/or exercisable for its shares during the Interim Period, unless required for the purpose of executing this Agreement.

(d) The New Company shall not conduct any activity whatsoever throughout the entire Interim Period unless required for the purpose of executing this Agreement, it shall not be a party to any agreements (apart from this Agreement) and it shall not have any obligations, apart from those deriving from this Agreement.

(e) Subject to the receipt of the approvals and the fulfillment of the Suspending Conditions, there is no prohibition, restriction or other obstacle, whether by law or by virtue of an agreement or commitment, to the New Company's engagement in this Agreement and to the fulfillment of all of its covenants pursuant hereto in their entirety, and the transaction pursuant to this Agreement shall not contradict its governing documents.

(f) It shall not perform any operation to change its capital structure or its incorporation documents during the Interim Period, unless required for the purpose of executing this Agreement.

(g) The signatories of this Agreement on its behalf are authorized to legally obligate it by their signatures, and all resolutions have been passed that are required by law for the purposes of its engagement in this Agreement and the fulfillment of its covenants pursuant thereto.

5. **Proceedings to execute the Arrangement**

5.1 Shortly after the signing date of this Agreement, the Israeli Company shall file an appropriate application with the Court for the purpose of obtaining its approval of the Arrangement.

5.2 Shortly after the signing date of this Agreement, the Israeli Company shall file an application with the Israel Tax Authority in order to receive the Tax Ruling.

5.3 Shortly after the signing date of this Agreement, the New Company shall file the Form S-4 Registration Statement with the SEC, and complete any related filings, and shall publish or disseminate any document that it shall be so required for the purpose of registering and listing the Consideration Shares under applicable United States securities law, for trading on the NASDAQ on the Consummation Date.

5.4 Throughout the entire Interim Period, the parties shall take all actions to fulfill all provisions of the law relating to the Arrangement, including the publishing of immediate reports as is required by, and in conformity with, the reporting obligations applying to the Israeli Company, the publishing of announcements in newspapers as required according to the Companies Regulations, the summoning of meetings of shareholders, option holders and/or creditors, the sending of notices etc., all in compliance with the instructions of the Court, the Companies Law and the Companies Regulations and applicable United States securities laws.

5.5 The parties shall act in cooperation and each shall exert its best efforts to bring about the approval of the Arrangement by the Court.

5.6 Trading of the Israeli Company's shares shall be discontinued on the Record Date and, as of the discontinuance of trading as stated, it shall not be possible to execute transactions and transfers of shares of Israeli Company the on the NASDAQ.

6. **Covenants during the Interim Period**

6.1 The parties shall act as follows during the Interim Period:

(a) The parties to this Agreement covenant to perform all actions and to sign all documents to the extent required for the purposes of carrying out the provisions of this Agreement and on time, and to exert maximum efforts to obtain any approval required to complete the Arrangement pursuant to, and in conformity with, the provisions of this Agreement, inclusive of all parts thereof (it is clarified that stated does not constitute any covenant with regard to the manner of voting by the Shareholders of the Israeli Company during a meeting of the Shareholders of the Israeli Company and/or by the Option-holders and/or by the creditors of the Israeli Company, insofar as their votes shall be required for the purpose of approving the Arrangement). Without derogating from the general purport of that stated, none of the parties shall perform any action that contradicts the covenants given by them and/or by any thereof in this Agreement.

(b) The Israeli Company covenants to not conduct any activities whatsoever in the New Company in a manner that might cause any of the New Company's representations and warranties in this Agreement to no longer be true and accurate, also on the Consummation Date.

7. **The Suspending Conditions**

7.1 The conditions specified hereunder are suspending conditions to the validation of this Agreement and/or to the completion of the Arrangement pursuant thereto, and they must be fulfilled by the Deadline for the Fulfillment of the Suspending Conditions. If all of the said Suspending Conditions are not fulfilled by the Deadline as stated, and the Deadline is not expressly extended by all of the parties in writing (and it is clarified that the parties may do so by mutual consent), then this Agreement shall be null and void, and none of the parties nor any third party shall have any cause deriving from this Agreement, including a cause and/or allegation and/or right to sue any of the parties to this Agreement, officers thereof, directors serving therein, their managers, their employees, their shareholders, their consultants, service-providers to them and/or any party on their behalf, apart from allegations in respect of a breach of covenants included in this Agreement, if any are breached:

(a) Receipt of the Court's approval for the Arrangement, including the approval that the issuance of the Consideration Shares and the Consideration Options is not a public offering and is exempt from publishing a prospectus in Israel, pursuant to the provisions of section 15.A(a)(3) of the Securities Law.;

(b) Receipt of Nasdaq's approval to list the Consideration Shares for trading on the NASDAQ and the Form S-4 Registration Statement has been declared effective by the SEC;

(c) Receipt of the Tax Ruling;

(d) Receipt of approvals from additional parties, insofar as might be required by law (in Israel and in the United States) for the purpose of carrying out the Arrangement pursuant to its conditions.

7.2 Subject to the provisions of the law, the parties are allowed to agree, each at its independent and absolute discretion, to waive the fulfillment of any of the Suspending Conditions.

7.3 If any of the approvals required within the scope of one of the Suspending Conditions is received while being made contingent upon the fulfillment of conditions, then the said Suspending Condition shall be deemed as if fulfilled only if both parties agree thereto.

7.4 If the Suspending Conditions are not fulfilled by May 31, 2019, or by a later date that might be mutually agreed upon between the parties, then, as of that date and thereafter, each of the parties shall be entitled to terminate this Agreement by issuing written notice to the other party. If a notice as stated is issued, then the validity of this Agreement shall be terminated on that date and none of the parties shall have any claim or allegation against the other party.

8. **Miscellaneous**

8.1 If any party delays or refrains from exercising or enforcing any of its rights pursuant to this Agreement, they shall not be construed as that party waiving or refraining from exercising its rights in the future, and it shall be allowed to use all or a portion of its rights at any time that it shall deem fit. No waiver, discount, extension, situation, amendment, addition to or elimination from this Agreement, or pursuant thereto, shall have any validity unless set forth in writing and signed by all parties to this Agreement.

8.2 Any amendment, correction and/or addition to this Agreement shall not have any validity and shall be deemed as if not made, unless set forth in writing and signed by all of the parties.

8.3 this Agreement may be signed in a number of copies, including by way of signing via fax or another electronic method , and each thereof shall be deemed an original copy, but together, they shall be deemed a single copy of that document.

8.4 Each party to this Agreement shall bear the tax liabilities applying to it by law.

8.5 The provisions of Israeli law shall apply to this Agreement. The competent courts in the District of Tel-Aviv – Jaffa, Israel, shall have sole jurisdiction in relation to any matter pertaining to this Agreement.

8.6 Any notice by any of the parties relating to this Agreement must be sent to the addressee via personal delivery or by registered mail to its address or via facsimile or via e-mail, as stated above, and shall be deemed delivered to the addressee on the date of delivery via personal delivery, or three days after its dispatch by registered mail, as stated above, or on the first business day after receiving confirmation of its transmission by facsimile or of delivery via e-mail, all as the case may be.

And in witness whereof the parties have hereunto signed:

/s/ Joseph E. Payne
Arcturus Therapeutics Ltd.

By: Joseph E. Payne
Title: President and CEO

/s/ Joseph E. Payne
Arcturus Therapeutics Holdings Inc.

By: Joseph E. Payne
Title: President and CEO

ANNEX B

CERTIFICATE OF INCORPORATION

OF

ARCTURUS THERAPEUTICS HOLDINGS INC.

ARTICLE I
NAME

The name of the Corporation is "ARCTURUS THERAPEUTICS HOLDINGS INC."

ARTICLE II
REGISTERED OFFICE AND AGENT

The address of the registered office of the Corporation in the State of Delaware is 251 Little Falls Drive, New Castle County, Delaware 19808. The name of its registered agent at such address is Corporation Service Company.

ARTICLE III
PURPOSE

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware ("***DGCL***").

ARTICLE IV
CAPITAL STOCK

A. Authorized Capital Stock. The Corporation is authorized to issue two classes of capital stock to be designated, respectively, "***Common Stock***" and "***Preferred Stock***." The total number of shares of capital stock which the Corporation is authorized to issue is Forty Million (40,000,000) shares. Thirty Million (30,000,000) shares shall be Common Stock, each having a par value of one-tenth of one cent ($0.001). Ten Million (10,000,000) shares shall be Preferred Stock, each having a par value of one-tenth of one cent ($0.001).

B. Preferred Stock. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors of the Corporation (the "***Board of Directors***") is hereby expressly authorized to provide for the issue of all or any of the shares of the Preferred Stock in one or more series, and to fix the number of shares and to determine or alter for each such series, such voting powers, if any, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issuance of such shares and as may be permitted by the DGCL. The Board of Directors is also expressly authorized to increase or decrease the number of shares of any series subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of the capital stock of the Corporation entitled to vote thereon, without a separate vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any certificate of designation filed with respect to any series of Preferred Stock.

C. Common Stock.

1. Voting. Each outstanding share of Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon by law or pursuant to this Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock). There shall be no cumulative voting.

2. Dividends. Subject to the preferential rights of the Preferred Stock, the holders of the Common Stock are entitled to receive, to the extent permitted by law, such dividends as may be declared from time to time by the Board of Directors.

3. No Preemptive Rights. The holders of Common Stock shall have no preemptive rights to subscribe for any shares of any class of capital stock of the Corporation whether now or hereafter authorized.

4. No Conversion Rights. Common Stock shall not be convertible into, or exchangeable for, shares of any other class or classes or of any other series of the same class of the Corporation's capital stock.

5. Liquidation Rights. In the event of the voluntary or involuntary liquidation, dissolution, distribution of assets or winding up of the Corporation, after distribution in full of the preferential amounts, if any, to be distributed to the holders of shares of Preferred Stock, holders of Common Stock shall be entitled to receive all of the remaining assets of the Corporation of whatever kind available for distribution to stockholders ratably in proportion to the number of shares of Common Stock held by them respectively. The Board of Directors may distribute in kind to the holders of Common Stock such remaining assets of the Corporation or may sell, transfer or otherwise dispose of all or any part of such remaining assets to any other corporation, trust or other entity and receive payment therefor in cash, stock or obligations of such other corporation, trust or other entity, or any combination thereof, and may sell all or any part of the consideration so received and distribute any balance thereof in kind to holders of Common Stock. The merger or consolidation of the Corporation into or with any other corporation, or the merger of any other corporation into it, or any purchase or redemption of shares of capital stock of the Corporation of any class, shall not be deemed to be a dissolution, liquidation or winding up of the Corporation for the purposes of this paragraph.

ARTICLE V
BOARD OF DIRECTORS

For the management of the business and for the conduct of the affairs of the Corporation, and in further definition, limitation and regulation of the powers of the Corporation, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. General Powers. The management of the business and the conduct of the affairs of the Corporation shall be vested in its Board of Directors.

B. Number of Directors; Vacancies and Newly Created Directorships. The number of directors constituting the board of directors shall be not fewer than one and not more than nine. The number of directors initially shall be one. Subject to the previous sentence and to the special rights of the holders of any class or series of stock to elect directors, the precise number of directors shall be fixed exclusively pursuant to a resolution adopted by the board of directors. Vacancies and newly-created directorships shall be filled exclusively pursuant to a resolution adopted by the board of directors.

ARTICLE VI
AMENDMENT OF CERTIFICATE OF INCORPORATION AND BYLAWS

A. Amendments to the Certificate of Incorporation. Notwithstanding any other provisions of this Certificate of Incorporation, and notwithstanding that a lesser percentage may be permitted from time to time by applicable law, no provision of Articles VI or VIII may he altered, amended or repealed in any respect (including by merger, consolidation or otherwise), nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 ⅔%) of the capital stock of the corporation entitled to vote generally in an election of directors, voting together as a single class.

B. Adoption, Amendment and Repeal of the Bylaws. In furtherance, and not in limitation of the powers conferred by law, the board of directors is expressly authorized to make, alter, amend and repeal the bylaws of the corporation subject to the power of the stockholders of the corporation to alter, amend or repeal the bylaws; provided, however, that with respect to the powers of stockholders to make, alter, amend or repeal the bylaws, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 ⅔%) of the capital stock of the corporation entitled to vote generally in an election of directors, voting together as a single class, shall be required to make, alter amend or repeal the bylaws of the corporation.

ARTICLE VII
STOCKHOLDER ACTIONS

A. No Stockholder Action without Meeting. No action shall be taken by the stockholders of the Corporation except at an annual or special meeting of stockholders called in accordance with the Bylaws of the Corporation, and no action shall be taken by the stockholders by written consent or electronic transmission.

B. Stockholder Nominations and Introduction of Business, Etc. Advance notice of stockholder nominations for the election of directors and of other business to be brought by stockholders before any meeting of the stockholders of the Corporation shall be given in the manner provided in the Bylaws of the Corporation. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation.

C. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office, the Chief Executive Officer (of if there is no Chief Executive Officer, the President) or the Chairperson of the Board of Directors, and may not be called by any other person or persons.

ARTICLE VIII
LIMITATION ON DIRECTOR LIABILITY; INDEMNIFICATION

A. The liability of the directors for monetary damages shall be eliminated to the fullest extent under applicable law. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated to the fullest extent permitted by the DGCL, as so amended.

B. In furtherance and not in limitation of the rights, powers, privileges, and discretionary authority granted or conferred by Title 8 of the DGCL or other statutes or laws of the State of Delaware, the Board of Directors is expressly authorized to provide indemnification of (and advancement of expenses to) directors, officers, employees, and agents of the Corporation (and any other persons to which applicable law permits the Corporation to provide indemnification) to the fullest extent permitted by law through bylaw provisions, agreements with indemnitees, vote of stockholders or disinterested directors or otherwise.

C. Any repeal, amendment or modification of this Article VIII shall be prospective and shall not affect the rights under this Article VIII in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification.

ARTICLE IX
INCORPORATOR

The name and mailing address of the incorporator is Ilan Katz, Esq., c/o Dentons US LLP, 1221 Avenue of the Americas, New York, NY 10020.

* * *

This Certificate of Incorporation has been executed as of January 28, 2019 by the undersigned who affirms that the statements made herein are true and correct.

/s/ Ilan Katz
Ilan Katz, Incorporator

ANNEX C

BYLAWS

OF

ARCTURUS THERAPEUTICS HOLDINGS INC.

ARTICLE 1.
STOCKHOLDERS

Section 1.1. **Annual Meeting**. An annual meeting of the stockholders for the election of directors to succeed those whose terms expire and for the transaction of such other business as may properly come before the meeting shall be held at the place, if any, on the date, and at the time as the Board of Directors shall each year fix, which date shall be within thirteen (13) months of the last annual meeting of stockholders.

Section 1.2. **Advance Notice of Nominations and Proposals of Business.**

(a) Nominations of persons for election to the Board of Directors and the proposal of business to be transacted by the stockholders may be made at an annual meeting of stockholders (i) pursuant to the Corporation's proxy materials with respect to such meeting, (ii) by or at the direction of the Board of Directors, or (iii) by any stockholder (or stockholders acting jointly) of record of the Corporation (the "*Record Stockholder*") at the time of the giving of the notice required in the following paragraph, who is entitled to vote at the meeting, who has complied with the notice procedures set forth in this section, and who owns more than 5% of the outstanding common stock of the Corporation. For the avoidance of doubt, the foregoing clause (iii) shall be the exclusive means for a stockholder to make nominations or propose business (other than business included in the Corporation's proxy materials pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended (such act, and the rules and regulations promulgated thereunder, the "*Exchange Act*")) at an annual meeting of stockholders.

(b) For nominations or business to be properly brought before an annual meeting by a Record Stockholder pursuant to clause (iii) of the foregoing paragraph, (i) the Record Stockholder must have given timely notice thereof in writing to the Secretary of the Corporation, and (ii) any such business must be a proper matter for stockholder action under Delaware law. To be timely, a Record Stockholder's notice shall be received by the Secretary at the principal executive offices of the Corporation not less than forty-five (45) or more than seventy-five (75) days prior to the one-year anniversary of the date on which the Corporation first mailed its proxy materials for the preceding year's annual meeting of stockholders; provided, however, that, subject to the last sentence of this paragraph (b), if the meeting is convened more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year's annual meeting, or if no annual meeting was held in the preceding year, notice by the Record Stockholder to be timely must be so received not later than the close of business on the later of (i) the ninetieth (90th) day before such annual meeting or (ii) the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. Notwithstanding anything in the preceding sentence to the contrary, in the event that the number of directors to be elected to the Board of Directors is increased and there has been no public announcement naming all of the nominees for director or indicating the increase in the size of the Board of Directors made by the Corporation at least ten (10) days before the last day a Record Stockholder may deliver a notice of nomination in accordance with the preceding sentence, a Record Stockholder's notice required by this bylaw shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Corporation. In no event shall an adjournment, or postponement of an annual meeting for which notice has been given, commence a new time period for the giving of a Record Stockholder's notice.

(c) Such Record Stockholder's notice shall set forth:

(i) if such notice pertains to the nomination of directors, as to each person whom the Record Stockholder proposes to nominate for election or reelection as a director all information relating to such person as would be required to be disclosed in solicitations of proxies for the election of such nominees as directors pursuant to Regulation 14A under the Exchange Act, and such person's written consent to serve as a director if elected;

(ii) as to any business that the Record Stockholder proposes to bring before the meeting, a brief description of such business, the reasons for conducting such business at the meeting and any material interest in such business of such Record Stockholder and the beneficial owner, if any, on whose behalf the proposal is made;

(iii) as to (1) the Record Stockholder giving the notice and (2) the beneficial owner, if any, on whose behalf the nomination or proposal is made each, (a "*party*"): (A) the name and address of each such party; (B) the class, series, and number of shares of the Corporation that are owned, directly or indirectly, beneficially and of record by each such party, (C) any option, warrant, convertible security, stock appreciation right, or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of the Corporation or with a value derived in whole or in part from the value of any class or series of shares of the Corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of capital stock of the Corporation or otherwise (a "*Derivative Instrument*") directly or indirectly owned beneficially by each such party, and any other direct or indirect opportunity to profit or share in any profit derived from any increase or decrease in the value of shares of the Corporation, (D) any proxy, contract, arrangement, understanding, or relationship pursuant to which either party has a right to vote, directly or indirectly, any shares of any security of the Corporation, (E) any short interest in any security of the Corporation held by each such party (for purposes of this Section 1.2(c), a person shall be deemed to have a short interest in a security if such person directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has the opportunity to profit or share in any profit derived from any decrease in the value of the subject security), (F) any rights to dividends on the shares of the Corporation owned beneficially directly or indirectly by each such party that are separated or separable from the underlying shares of the Corporation, (G) any proportionate interest in shares of the Corporation or Derivative Instruments held, directly or indirectly, by a general or limited partnership in which either party is a general partner or, directly or indirectly, beneficially owns an interest in a general partner and (H) any performance-related fees (other than an asset-based fee) that each such party is directly or indirectly entitled to, based on any increase or decrease in the value of shares of the Corporation or Derivative Instruments, if any, as of the date of such notice, including without limitation any such interests held by members of each such party's immediate family sharing the same household (which information set forth in this paragraph shall be supplemented by such stockholder or such beneficial owner, as the case may be, not later than ten (10) days after the record date for the meeting to disclose such ownership as of the record date); and

(iv) any other information relating to each such party that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election of directors in a contested election pursuant to Section 14 of the Exchange Act.

(d) A person shall not be eligible for election or re-election as a director at an annual meeting unless (i) the person is nominated by a Record Stockholder in accordance with clause (iii) of Section 1.2(a) or (ii) the person is nominated by or at the direction of the Board of Directors. Only such business shall be conducted at an annual meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this section. The chair of the meeting shall have the power and the duty to determine whether a nomination or any business proposed to be brought before the meeting has been made in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, to declare that such defectively proposed business or nomination shall not be presented for stockholder action at the meeting and shall be disregarded.

(e) Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting by or at the direction of the Board of Directors. The notice of such special meeting shall include the purpose for which the meeting is called. Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of the Board of Directors or (ii) by any stockholder of record at the time of giving of notice provided for in this paragraph, who shall be entitled to vote at the meeting and who delivers a written notice to the Secretary setting forth the information set forth in Section 1.2(c)(i) and (iii) of this Article 1. Nominations by stockholders of persons for election to the Board of Directors may be made at such a special meeting of stockholders only if such stockholder of record's notice required by the preceding sentence shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to such special meeting or the tenth (10^{th}) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall an adjournment, or postponement of a special meeting for which notice has been given, commence a new time period for the giving of a stockholder of record's notice. A person shall not be eligible for election or reelection as a director at a special meeting unless the person is nominated (x) by or at the direction of the Board of Directors or (y) by a stockholder of record in accordance with the notice procedures set forth in this Article 1.

(f) For purposes of these Bylaws, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(g) Notwithstanding the foregoing provisions of this Section 1.2, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to matters set forth in this Section 1.2. Nothing in this Section 1.2 shall be deemed to affect any rights of stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act.

Section 1.3. **Special Meetings; Notice**. Special meetings of stockholders shall be called as provided in the Certificate of Incorporation. Upon request in writing sent by registered or certified mail to the Chairman of the Board, the President, or Chief Executive Officer by any stockholder or stockholders entitled to call a special meeting of stockholders, the Board of Directors shall determine a place and time for such meeting, which time shall be not less than ninety (90) nor more than one hundred (100) days after the receipt and determination of the validity of such request, and a record date for the determination of stockholders entitled to vote at such meeting in the manner set forth in Section 5.5 hereof. Following such receipt and determination, it shall be the duty of the Secretary to cause notice to be given to the stockholders entitled to vote at such meeting, in the manner set forth in Section 1.4 hereof, that a meeting will be held at the time and place so determined. Notice of every special meeting shall state the purpose of the meeting and the business conducted at a special meeting of stockholders shall be limited to the business set forth in the notice of meeting. The Board of Directors may postpone or reschedule any previously called special meeting.

Section 1.4. **Notice of Meetings**.

(a) Notice of the place, if any, date and time of all meetings of the stockholders, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed present in person and vote at such meeting, and, in the case of all special meetings of stockholders, the purpose of the meeting, shall be given, not less than ten (10) nor more than sixty (60) days before the date on which the meeting is to be held, to each stockholder entitled to vote at the meeting, except as otherwise provided in these bylaws or required by law (meaning in these bylaws, as required from time to time by the Delaware General Corporation Law (the "*DGCL*") or the Corporation's Certificate of Incorporation).

(b) When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place, if any, thereof and the means of remote communication, if any, by which stockholder and proxyholders may be deemed to be present in person of such adjourned meeting are announced at the meeting at which the adjournment is taken; *provided, however,* that if the date of any adjourned meeting is more than thirty (30) days after the date for which the meeting was originally noticed, or if a new record date is fixed for the adjourned meeting, notice of the place, if any, date and time of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, shall be given in conformity herewith. At any adjourned meeting, any business may be transacted that might have been transacted at the original meeting.

Section 1.5. **Quorum**.

(a) At any meeting of the stockholders, the holders of shares of stock of the Corporation entitled to cast at least 33⅓ percent (33.33%) of the total votes entitled to be cast by the holders of all outstanding capital stock of the Corporation, present in person or by proxy, shall constitute a quorum for all purposes, unless or except to the extent that the presence of a larger number is required by law. Where a separate vote by one or more classes or series is required, the holder of shares entitled to cast 33⅓ percent (33.33%) of the total votes entitled to be cast by the holders of the shares of the class or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter.

(b) If a quorum shall fail to attend any meeting, the chair of the meeting may adjourn the meeting to another place, if any, date and time.

Section 1.6. **Organization**. The Chairman of the Board or, in his or her absence, the person whom the Board of Directors designates or, in the absence of that person or the failure of the Board of Directors to designate a person, the Chief Executive Officer of the Corporation or, in his or her absence, the person chosen by the holders of a majority of the shares entitled to vote who are present, in person or by proxy, shall call to order any meeting of the stockholders and act as chair of the meeting. In the absence of the Secretary of the Corporation, the secretary of the meeting shall be the person the chair appoints.

Section 1.7. **Conduct of Business**. The chair of any meeting of stockholders shall determine the order of business and the rules of procedure for the conduct of the meeting, including the manner of voting and the conduct of discussion as the chair determines to be in order. The chair shall have the power to adjourn the meeting to another place, if any, date and time. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting.

Section 1.8. **Proxies; Inspectors.**

(a) At any meeting of the stockholders, every stockholder entitled to vote may vote in person or by proxy authorized by an instrument in writing or by a transmission permitted by law filed in accordance with the procedure established for the meeting. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission created pursuant to this Section 1.8 may be substituted or used in lieu of the original writing or transmission that could be used, provided that the copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission.

(b) The Board of Directors shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting may, and to the extent required by law, shall, appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of inspectors.

Section 1.9. **Voting**. All elections of directors shall be determined by a plurality of the votes cast, and except as otherwise required by law or these bylaws, all other matters shall be determined by a majority of the votes cast on the matter affirmatively or negatively.

Section 1.10. **Stock List**.

(a) A complete list of stockholders entitled to vote at any meeting of stockholders, arranged in alphabetical order for each class of stock and showing the address of each such stockholder and the number of shares registered in his or her name, shall be open to the examination of any such stockholder, for any purpose germane to the meeting, during ordinary business hours for a period of at least ten (10) days prior to the meeting as required by law.

(b) The stock list shall also be open to the examination of any such stockholder during the whole time of the meeting as provided by law. The Corporation may look to this list as the sole evidence of the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

Section 1.11. **Action without Meeting**. No action shall be taken by the stockholders except at an annual or special meeting of stockholders called in accordance with these Bylaws, and no action shall be taken by the stockholders by written consent or by electronic transmission.

ARTICLE 2.
BOARD OF DIRECTORS

Section 2.1. **Number, Election, Term and Qualifications of Directors**.

(a) Subject to the special right of the holders of any class or series of stock to elect directors, the number of directors shall be fixed from time to time exclusively by the Board of Directors pursuant to a resolution adopted by a majority of the total number of directors which the Corporation would have if there were no vacancies.

(b) Directors need not be stockholders to be qualified for election or service as a director of the Corporation.

Section 2.2. **Removal; Resignation**. Any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors. Any director may resign at any time upon notice given in writing to the Corporation. A resignation is effective when the resignation is delivered unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events. A resignation that is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable.

Section 2.3. **Newly Created Directorships and Vacancies**. Except as otherwise required by law and subject to the rights of the holders of any series of preferred stock with respect to such series of preferred stock, newly created directorships resulting from any increase in the authorized number of directors or any vacancies on the Board of Directors resulting from death, resignation, retirement, disqualification, removal from office or other cause may be filled by a majority vote of the directors then in office, though less than a quorum, or by a sole remaining director, or by the stockholders. Directors so chosen shall hold office for a term expiring at the annual meeting of stockholders at which the term of office of the class to which they have been elected expires and until the director’s successor shall have been duly elected and qualified. No decrease in the number of authorized directors constituting the entire Board of Directors shall shorten the term of any incumbent director.

Section 2.4. **Regular Meetings**. Regular meetings of the Board of Directors shall be held at the place, on the date and at the time as shall have been established by the Board of Directors and publicized among all directors. A notice of a regular meeting the date of which has been so publicized shall not be required.

Section 2.5. **Special Meetings**. Special meetings of the Board of Directors may be called by the Chairman, the Chief Executive Officer, the President, or by two or more directors then in office and shall be held at the place, on the date, and at the time as they or he or she shall fix. Notice of the place, date, and time of each special meeting shall be given each director either (a) by mailing written notice not less than five (5) days before the meeting, or (b) by telephone or by telegraphing or telexing or by facsimile or electronic transmission of the same not less than 24 hours before the meeting. Unless otherwise stated in the notice thereof, any and all business may be transacted at a special meeting.

Section 2.6. **Quorum**. At any meeting of the Board of Directors, a majority of the total number of the whole Board of Directors shall constitute a quorum for all purposes. If a quorum shall fail to attend any meeting, a majority of those present may adjourn the meeting to another place, date or time, without further notice or waiver thereof.

Section 2.7. **Participation in Meetings by Conference Telephone or Other Communications Equipment**. Members of the Board of Directors, or of any committee thereof, may participate in a meeting of the Board or committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other and such participation shall constitute presence in person at the meeting.

Section 2.8. **Conduct of Business**. At any meeting of the Board of Directors, business shall be transacted in the order and manner as the Board may from time to time determine, and all matters shall be determined by the vote of a majority of the directors present, except as otherwise provided in these bylaws or required by law. If the Corporation has an even number of directors in office, all of whom are in attendance at the meeting, who are equally divided, the Chairman of the Board shall have the deciding vote. The Board of Directors may take action without a meeting if all members thereof consent thereto in writing or by electronic transmission, and the writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 2.9. **Compensation of Directors**. Unless otherwise restricted by the Certificate of Incorporation, the Board of Directors shall have the authority to fix the compensation of the directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors or paid a stated salary or paid other compensation as directors. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of standing or special committees may be allowed compensation for attending committee meetings.

ARTICLE 3.
COMMITTEES

Section 3.1. **Committees of the Board of Directors**. The Board of Directors may from time to time designate standing and special committees of the Board, with such lawfully delegable powers and duties as it thereby confers, to serve at the pleasure of the Board and shall, for those committees and any others provided for herein, elect a director or directors to serve as the member or members, designating, if it desires, other directors as alternate members who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of any member of any committee and any alternate member in his or her place, the member or members of the committee present at the meeting and not disqualified from voting, whether or not he or she or they constitute a quorum, may by unanimous vote appoint another member of the Board of Directors to act at the meeting in the place of the absent or disqualified member. The responsibilities of each standing committee shall be stated in the committee’s charter, as approved by the Board of Directors. Each special committee shall perform such duties and exercise such powers as may be delegated to it expressly by the Board of Directors.

Section 3.2. **Conduct of Business**. Each committee may determine the procedural rules for meeting and conducting its business and shall act in accordance therewith, except as otherwise provided herein or required by law.

ARTICLE 4.
OFFICERS

Section 4.1. **Generally**. The officers of the Corporation shall consist of a Chairman of the Board, a Chief Executive Officer or a President, a Secretary, and a Treasurer. The officers of the Corporation may consist of a Chief Financial Officer, one or more Vice Presidents, a Principal Accounting Officer, and the other officers as may from time to time be appointed by the Board of Directors. Officers shall be elected by the Board of Directors, which shall consider that subject at its first meeting after every annual meeting of stockholders. Each officer shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal. Any number of offices may be held by the same person. The salaries of officers elected by the Board of Directors shall be fixed from time to time by the Board of Directors or by the officers as may be designated by resolution of the Board.

Section 4.2. **Chairman of the Board**. The Chairman of the Board shall preside at all meetings of stockholders and the Board of Directors. The Chairman shall have the other powers and duties as may be delegated from time to time by the Board of Directors.

Section 4.3. **Chief Executive Officer**. The Chief Executive Officer shall, subject to the oversight of the Board of Directors, have general supervision, direction and control of the business and the officers, employees and agents of the Corporation. In the absence of the Chairman of the Board of Directors, the Chief Executive Officer, if such officer is a director, shall preside at all meetings of the Board of Directors, unless the Board of Directors determines otherwise. The Chief Executive Officer shall perform such other duties and have such other powers as the Board of Directors shall designate from time to time.

Section 4.4. **President**. Subject to the oversight of the Board of Directors and the supervision, control and authority of the Chief Executive Officer, the President shall have general supervision, direction and control of the business and the officers, employees and agents of the Corporation. In the absence of a Chief Executive Officer appointed by the Board, the President shall be the chief executive officer of the Corporation. The President shall perform such other duties and have such other powers as the Board of Directors shall designate from time to time.

Section 4.5. **Vice President**. Each Vice President shall have the powers and duties as may be delegated to him or her by the Board of Directors. One (1) Vice President may be designated by the Board to perform the duties and exercise the powers of the chief executive officer in the event of that officer's absence or disability.

Section 4.6. **Chief Financial Officer and Treasurer**. Each of the Chief Financial Officer and the Treasurer shall control, monitor and arrange the financial affairs of the corporation and shall maintain the financial records of the Corporation, consistent with the responsibilities delegated to each of them by the Corporation's Chief Executive Officer or President. The Chief Financial Officer or Treasurer, as the case may be, shall receive and deposit all monies belonging to the Corporation and shall pay out the same only in such manner as the Board of Directors may from time to time determine, and shall have such other powers and perform such other duties as the Board of Directors may require.

Section 4.7. **Secretary**. The Secretary shall issue all authorized notices for, and shall keep minutes of, all meetings of the stockholders and the Board of Directors. He or she shall have charge of the corporate books and shall perform the other duties as the Board of Directors may from time to time prescribe.

Section 4.8. **Principal Accounting Officer**. The Principal Accounting Officer shall have charge of the accounting affairs of the Corporation and shall have such other powers and perform such other duties as the Board of Directors shall designate. The Principal Accounting Officer shall report to the Chief Financial Officer.

Section 4.9. **Delegation of Authority**. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officers or agents, notwithstanding any provision hereof.

Section 4.10. **Removal**. The Board of Directors may remove any officer of the Corporation at any time, with or without cause.

Section 4.11. **Action with Respect to Securities of Other Corporations**. Unless otherwise directed by the Board of Directors, the Chief Executive Officer or any officer of the Corporation authorized by the Chief Executive Officer shall have power to vote and otherwise act on behalf of the Corporation, in person or by proxy, at any meeting of stockholders or equity holders of any other corporation or entity or in which this Corporation may hold securities and otherwise to exercise any and all rights and powers which this Corporation may possess by reason of its ownership of securities in the other corporation or entity.

ARTICLE 5.
STOCK

Section 5.1. **Certificates of Stock**. Each stockholder shall be entitled to a certificate signed by, or in the name of the Corporation by, the Chairman of the Board, the Vice Chairman of the Board, the Chief Executive Officer, President or Vice President, and by the Secretary or an Assistant Secretary, or the Treasurer or an Assistant Treasurer, certifying the number of shares owned by him or her unless the Board of Directors provides by resolution that some or all of any or all classes or series of stock shall be uncertificated shares. Any or all of the signatures on the certificate may be by facsimile.

Section 5.2. **Transfers of Stock**. Transfers of stock shall be made only upon the transfer books of the Corporation kept at an office of the Corporation or by transfer agents designated to transfer shares of the stock of the Corporation. Except where a certificate is issued in accordance with Section 5.3 of these bylaws, an outstanding certificate for the number of shares involved shall be surrendered for cancellation before a new certificate is issued therefore.

Section 5.3. **Lost, Stolen or Destroyed Certificates**. In the event of the loss, theft, or destruction of any certificate of stock, another may be issued in its place pursuant to the regulations that the Board of Directors may establish concerning proof of the loss, theft, or destruction and concerning the giving of a satisfactory bond or bonds of indemnity.

Section 5.4. **Regulations**. The issue, transfer, conversion and registration of certificates of stock shall be governed by the other regulations as the Board of Directors may establish.

Section 5.5. **Record Date.**

(a) In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders, or to receive payment of any dividend or other distribution or allotment of any rights or to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may, except as otherwise required by law, fix a record date, which record date shall not precede the date on which the resolution fixing the record date is adopted and which record date shall not be more than sixty (60) nor less than ten (10) days before the date of any meeting of stockholders, nor more than sixty (60) days prior to the time for the other action described above; *provided*, *however*, that if no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given or, if notice is waived, at the close of business on the day next preceding the day on which

the meeting is held, and, for determining stockholders entitled to receive payment of any dividend or other distribution or allotment of rights or to exercise any rights of change, conversion or exchange of stock or for any other purpose, the record date shall be at the close of business on the day on which the Board of Directors adopts a resolution relating thereto.

(b) A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided*, *however*, that the Board of Directors may fix a new record date for the adjourned meeting.

(c) In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent shall, by written notice to the Secretary, request the Board of Directors to fix a record date. The Board of Directors shall promptly, but in all events within ten (10) days after the date on which such a request is received, adopt a resolution fixing the record date (unless the Board of Directors has previously fixed a record date pursuant to the first sentence hereof). If no record date has been fixed by the Board of Directors pursuant to the first sentence hereof or otherwise within ten (10) days of the date on which such a request is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, where no prior action by the Board of Directors is required by applicable law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered agent in Delaware, its principal place of business, or to any officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are reported. Delivery shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by applicable law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the date on which the Board of Directors adopts the resolution taking the prior action.

ARTICLE 6.
NOTICES

Section 6.1. Notices.

(a) If mailed, notice to stockholder shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

(b) **Affidavit of Mailing**. An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected, or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(c) **Methods of Notice**. It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(d) **Notice To Person With Whom Communication Is Unlawful**. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any

person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(e) **Notice to Stockholders Sharing an Address**. Except as otherwise prohibited under DGCL, any notice given under the provisions of DGCL, the Certificate of Incorporation or these Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within sixty (60) days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

Section 6.2. **Waivers**. A written waiver of any notice, signed by a stockholder or director, or a waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business nor the purpose of any meeting need be specified in the waiver. Attendance at any meeting shall constitute waiver of notice except attendance for the sole purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened.

ARTICLE 7.
MISCELLANEOUS

Section 7.1. **Corporate Seal**. The Board of Directors may provide a suitable seal, containing the name of the Corporation, which seal shall be in the charge of the Secretary. If and when so directed by the Board of Directors, duplicates of the seal may be kept and used by the Treasurer or by an Assistant Secretary or Assistant Treasurer.

Section 7.2. **Facsimile Signatures**. In addition to the provisions for use of facsimile signatures elsewhere specifically authorized in these Bylaws, facsimile signatures of any officer or officers of the Corporation may be used whenever and as authorized by the Board of Directors or a committee thereof.

Section 7.3. **Reliance upon Books, Reports and Records**. Each director, each member of any committee designated by the Board of Directors, of the Corporation shall, in the performance of his or her duties, be fully protected in relying in good faith upon the books of account or other records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers or employees, or committees of the Board of Directors so designated, or by any other person as to matters which such director or committee member reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation.

Section 7.4. **Fiscal Year**. The fiscal year of the Corporation shall be as fixed by the Board of Directors.

Section 7.5. **Time Periods**. In applying any provision of these bylaws which requires that an act be done or not be done a specified number of days prior to an event or that an act be done during a period of a specified number of days prior to an event, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

Section 7.6. **Electronic Transmission**. When used in these Bylaws, the terms "written" and "in writing" shall include any "electronic transmission," as defined in Section 232(c) of the DGCL, including without limitation any telegram, cablegram, facsimile transmission and communication by electronic mail.

ARTICLE 8.
INDEMNIFICATION

Section 8.1. **Right to Indemnification**. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "*proceeding*"), by reason of the fact that he or she is or was a director or an officer of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (an "*indemnitee*"), whether the basis of the proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director, officer, employee or agent, shall be indemnified and held harmless by the Corporation to the fullest extent permitted by applicable law as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that the amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by the indemnitee in connection therewith; provided, however, that, except as provided in Section 8.3 with respect to proceedings to enforce rights to indemnification and advancement of expenses, the Corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by the indemnitee only if the proceeding (or part thereof) was authorized by the Board of Directors of the Corporation.

Section 8.2. **Right to Advancement of Expenses**. The right to indemnification conferred in Section 8.1 shall include the right to be paid by the Corporation the expenses (including attorney's fees) incurred in defending any such proceeding in advance of its final disposition (an "*advancement of expenses*"); provided, however, that, if the DGCL requires, an advancement of expenses incurred by an indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by the indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the Corporation of an undertaking (an "*undertaking*"), by or on behalf of the indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (a "*final adjudication*") that the indemnitee is not entitled to be indemnified for the expenses under this Section 8.2 or otherwise. The rights to indemnification and to the advancement of expenses conferred in Sections 8.1 and 8.2 shall be contract rights and such rights shall continue as to an indemnitee who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the indemnitee's heirs, executors and administrators.

Section 8.3. **Right of Indemnitee to Bring Suit**. If a claim under Section 8.1 or 8.2 is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim to the fullest extent permitted by law. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit. In any suit brought by (i) the indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the indemnitee to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that, the indemnitee has not met any applicable standard for indemnification set forth in the DGCL. Neither the failure of the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth in the DGCL, nor an actual determination by the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) that the indemnitee has not met the applicable standard of conduct, shall create a presumption that the indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the indemnitee, be a defense to the suit. In any suit brought by

the indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Article 8 or otherwise shall be on the Corporation.

Section 8.4. **Non-exclusivity of Rights**. The rights to indemnification and to the advancement of expenses conferred in this Article 8 shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, the Corporation's Certificate of Incorporation, bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

Section 8.5. **Insurance**. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify the person against the expense, liability or loss under the DGCL.

Section 8.6. **Indemnification of Officers, Employees and Agents of the Corporation**. The Corporation may, to the extent authorized from time to time by the Board of Directors, grant rights to indemnification and to the advancement of expenses to any officer, employee or agent of the Corporation to the fullest extent of the provisions of this Article 8 with respect to the indemnification and advancement of expenses of directors and officers of the Corporation.

ARTICLE 9.
Forum for Adjudication of Disputes

Unless the Corporation consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, or (iv) any action asserting a claim governed by the internal affairs doctrine shall be a state or federal court located within the state of Delaware, in all cases subject to the court's having personal jurisdiction over the indispensible parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article 9.

ARTICLE 10.
AMENDMENTS

These Bylaws may be altered, amended and repealed, and new bylaws adopted, only in compliance with and as authorized by the Certificate of Incorporation.

ARTICLE 11.
FORCE AND EFFECT

These Bylaws are subject to the provisions of the DGCL and the Certificate of Incorporation, as the same may be amended from time to time. If any provision in these Bylaws is inconsistent with an express provision of either the DGCL or the Certificate of Incorporation, the provisions of the DGCL or the Certificate of Incorporation, as the case may be, shall govern, prevail, and control the extent of such inconsistency.

Adopted January 28, 2019

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. Indemnification of Directors and Officers

Under Section 145 of the DGCL, a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation (or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. In the case of an action brought by or in the right of a corporation, the corporation may indemnify any person who was or is a party or is threatened to be made a party to any such threatened, pending or completed action by reason of the fact that the person is or was a director, officer, employee or agent of the corporation (or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) only against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent the appropriate court finds that, in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as the court shall deem proper.

The Arcturus-Delaware certificate of incorporation will provide that its directors and officers will be indemnified by Arcturus-Delaware to the fullest extent authorized by Delaware law as it now exists or may in the future be amended, against all expenses, liabilities and loss incurred in connection with their service as a director or officer on behalf of the corporation.

As permitted by Section 102(b)(7) of the DGCL, the Arcturus-Delaware certificate of incorporation will provide that a director of Arcturus-Delaware shall not be personally liable to Arcturus-Delaware or its stockholders for monetary damages for breach of fiduciary duty as a director, except for such liability as is expressly not subject to limitation under the DGCL, as the same exists or may hereafter be amended to further limit or eliminate such liability.

Arcturus-Delaware will also enter into certain indemnification agreements with its directors and officers. The indemnification agreements provide the registrant's directors and officers with further indemnification, to the maximum extent permitted by the DGCL.

As permitted by Section 145(g) of the DGCL, Arcturus-Delaware will also maintain a directors' and officers' insurance policy which insures the directors and officers of Arcturus-Delaware against liability asserted against such persons in such capacity whether or not such directors or officers have the right to indemnification pursuant to the Arcturus-Delaware certificate of incorporation, bylaws or otherwise.

Item 21. Exhibits and Financial Statement Schedules

The exhibits listed below in the "Exhibit Index" are filed as part of, or are incorporated by reference in, this Registration Statement and are numbered in accordance with Item 601 of Regulation S-K.

Item 22. Undertakings

The undersigned registrant hereby undertakes:

(a) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(1) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933.

(2) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total U.S. dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(3) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.

(b) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(d) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the Registration Statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the Registration Statement or made in a document incorporated or deemed incorporated by reference into the Registration Statement or prospectus that is part of the Registration Statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the Registration Statement or prospectus that was part of the Registration Statement or made in any such document immediately prior to such date of first use.

(e) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser

(f) For purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(g) That prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this Registration Statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other Items of the applicable form.

(h) That every prospectus (1) that is filed pursuant to paragraph (g) immediately preceding, or (2) that purports to meet the requirements of Section 10(a)(3) of the Securities Act of 1933 and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the Registration Statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(i) To respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11, or 13 of this Form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the Registration Statement through the date of responding to the request.

(j) To supply by means of a post-effective amendment all information concerning a transaction, and the Company being acquired involved therein, that was not the subject of and included in the Registration Statement when it became effective.

(k) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

EXHIBIT INDEX

Exhibit No.	Description
2.1*	Form of Exchange Agreement (attached as Annex A to the proxy statement / prospectus which forms part of this Registration Statement and is incorporated herein by reference)
3.1	Articles of Association of the Company. Incorporated by reference to Exhibit No. 4.1 to the Company's Registration Statement on Form S-8 filed on November 30, 2017 (File No. 333-221830)
3.2*	Form of Certificate of Incorporation of Arcturus-Delaware (attached as Annex B to the proxy statement / prospectus which forms part of this Registration Statement and is incorporated herein by reference)
3.3*	Form of Bylaws of Arcturus-Delaware (attached as Annex C to the proxy statement / prospectus which forms part of this Registration Statement and is incorporated herein by reference)
4.1†	Arcturus Therapeutics Ltd. 2018 Omnibus Equity Incentive Plan. Incorporated by reference to Exhibit 99.3 to the Company's Report of Foreign Private Issuer on Form 6-K filed on July 27, 2018 (File No. 001-35932).
4.2†	Arcturus Therapeutics Ltd. Amended and Restated Compensation Policy for Company Office Holders. Incorporated by reference to Exhibit 99.2 to the Company's Report of Foreign Private Issuer on Form 6-K filed on July 27, 2018 (File No. 001-35932).
4.3	Agreement and Plan of Merger and Reorganization among Alcobra Ltd., Aleph MergerSub, Inc. and Arcturus Therapeutics, Inc., dated as of September 27, 2017. Incorporated by reference to Exhibit 99.2 to the Company's Report of Foreign Private Issuer on Form 6-K filed on September 28, 2017 (File No. 001-35932)
4.4	Form of Indemnification Agreement. Incorporated by reference to Exhibit 10.4 to Form F-1/A filed on February 19, 2013 (File No. 333-186003).
4.5†	Alcobra Ltd. Amended and Restated 2010 Incentive Option Plan. Incorporated by reference to Exhibit 4.3 to Form 20-F filed on April 28, 2017 (File No. 001-35932).
4.6†	2013 Equity Incentive Plan of Arcturus Therapeutics, Inc. Incorporated by reference to Exhibit 99.1 to Form S-8 filed on November 30, 2017 (File No. 333-221830).
5.1**	Opinion of Dentons US LLP as to the validity of the securities being registered by Arcturus-Delaware
8.1*	Opinion of Dentons US LLP as to certain U.S. federal income tax matters
8.2**	Opinion of Barnea Jaffa Lande & Co Law offices as to certain Israeli tax matters
10.1	Loan and Security Agreement, dated October 12, 2018, by and between Western Alliance Bank and Arcturus Therapeutics, Inc. Incorporated by reference to Exhibit 10.1 to the Company's Report of Foreign Private Issuer on Form 6-K filed on October 15, 2018 (File No. 001-35932).
10.2	Sales Agreement, dated October 15, 2018, by and between Arcturus Therapeutics Ltd. and Leerink Partners LLC. Incorporated by reference to Exhibit 10.2 to the Company's Report of Foreign Private Issuer on Form 6-K filed on October 15, 2018 (File No. 001-35932).
10.3	Amended and Restated Amendment to Development and Option Agreement, dated as of September 28, 2018, by and between CureVac AG and Arcturus Therapeutics Inc. Incorporated by reference to Exhibit 99.2 to the Company's Report of Foreign Private Issuer on Form 6-K filed on October 1, 2018 (File No. 001-35932).
10.4	Research Collaboration and License Agreement, by and between Arcturus Therapeutics, Inc. and Janssen Pharmaceuticals, Inc., dated October 18, 2017. Incorporated by reference to Exhibit 4.7 to Form 20-F filed on May 14, 2018 (File No. 001-35932).
10.5	Research and Exclusive License Agreement, by and between Arcturus Therapeutics, Inc. and Synthetic Genomics, Inc., effective October 24, 2017. Incorporated by reference to Exhibit 4.8 to Form 20-F filed on May 14, 2018 (File No. 001-35932)

Exhibit No.	Description
10.6	Research Agreement, by and between Arcturus Therapeutics, Inc. and Millennium Pharmaceuticals, Inc., a wholly-owned subsidiary of Takeda Pharmaceutical Company Limited, effective December 6, 2016, as amended December 21, 2017. Incorporated by reference to Exhibit 4.9 to Form 20-F filed on May 14, 2018 (File No. 001-35932).
10.7	Research Collaboration and License Agreement, by and between Arcturus Therapeutics, Inc. and Ultragenyx Pharmaceutical Inc., entered into as of October 26, 2015, as amended October 17, 2017 and April 20, 2018. Incorporated by reference to Exhibit 4.10 to Form 20-F filed on May 14, 2018 (File No. 001-35932).
10.8	Letter Agreement, by and between Arcturus Therapeutics, Inc. and Cystic Fibrosis Foundation Therapeutics, Inc., dated May 16, 2017. Incorporated by reference to Exhibit 4.11 to Form 20-F filed on May 14, 2018 (File No. 001-35932).
10.9	Development and Option Agreement, by and between Arcturus Therapeutics, Inc. and CureVac AG, dated January 1, 2018, as amended May 3, 2018. Incorporated by reference to Exhibit 4.12 to Form 20-F filed on May 14, 2018 (File No. 001-35932).
10.10	Co-Development and Co-Commercialization Agreement, by and between Arcturus Therapeutics, Inc. and CureVac AG, dated January 1, 2018. Incorporated by reference to Exhibit 4.13 to Form 20-F filed on May 14, 2018 (File No. 001-35932).
10.11	License Agreement, by and between Arcturus Therapeutics, Inc., as successor-in-interest to Marina Biotech, Inc., and Protiva Biotherapeutics Inc., dated as of November 28, 2012. Incorporated by reference to Exhibit 4.14 to Form 20-F/A filed on July 10, 2018 (File No. 001-35932).
10.12	Patent Assignment and License Agreement, by and between Arcturus Therapeutics, Inc. and Marina Biotech, Inc., dated as of August 9, 2013. Incorporated by reference to Exhibit 4.15 to Form 20-F filed on May 14, 2018 (File No. 001-35932)
10.13	Share Exchange Agreement, dated as of February 11, 2019, by and between Arcturus Therapeutics Ltd. and Arcturus Therapeutics Holdings Inc. Incorporated by reference to Exhibit 10.13 to Form 10-K filed on March 15, 2019 (File No. 001-35932)
10.14	Amended and Restated Joint Venture, Research Collaboration and License Agreement, dated as of July 4, 2018 by and between Arcturus Therapeutics Inc. and Providence Therapeutics, Inc. Incorporated by reference to Exhibit 10.14 to Form 10-K filed on March 15, 2019 (File No. 001-35932)
10.15	Research and Collaboration Agreement, dated as of March 8, 2019 by and between Arcturus Therapeutics Inc. and Millennium Pharmaceuticals, Inc., a wholly-owned subsidiary of Takeda Pharmaceutical Company Limited. Incorporated by reference to Exhibit 10.15 to Form 10-K filed on March 15, 2019 (File No. 001-35932)
14.1	Code of Business Conduct and Ethics. Incorporated by reference to Exhibit 14.1 to Form 10-K filed on March 15, 2019 (File No. 001-35932)
21.1	Subsidiaries of the Registrant. Incorporated by reference to Exhibit 21.1 to Form 10-K filed on March 15, 2019 (File No. 001-35932)
23.1*	Consent of Independent Registered Public Accounting Firm
23.2*	Consent of Independent Registered Public Accounting Firm
23.3**	Consent of Barnea Jaffa Londe & Co. Law Offices (included in Exhibit 8.2)
23.4**	Consent of Dentons US LLP (included in Exhibit 5.1)

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Exhibit No.	Description
23.5*	Consent of Dentons US LLP (included in Exhibit 8.1)
24.1*	Power of Attorney (included on the signature page of this registration statement)
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase
101.DEF*	XBRL Taxonomy Extension Definition Linkbase
101.LAB*	XBRL Taxonomy Extension Label Linkbase
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase

* Filed herewith
** To be filed by Amendment
† Management Compensatory plan, contract or arrangement.

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-4 and has duly caused this Registration Statement on Form S-4 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on March 15, 2019.

ARCTURUS THERAPEUTICS LTD.

By: /s/ Joseph E. Payne
Name: Joseph E. Payne
Title: Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Arcturus Therapeutics Holdings Inc., hereby severally constitute and appoint Joseph E. Payne and Dr. Padmanabh Chivukula, and each of them individually, our true and lawful attorney to sign for us and in our names in the capacities indicated below any and all amendments or supplements, including any post-effective amendments, to this Registration Statement on Form S-4 and to file the same, with exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorney full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming our signatures to said amendments to this Registration Statement signed by our said attorney and all else that said attorney may lawfully do and cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement on Form S-4 has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Joseph E. Payne Joseph E. Payne	President, Chief Executive Officer and Director (*principal executive officer*)	March 15, 2019
/s/ Dr. Padmanabh Chivukula Dr. Padmanabh Chivukula	Chief Scientific Officer, Chief Operating Officer and Secretary	March 15, 2019
/s/ Dr. Peter Farrell Dr. Peter Farrell	Chairman of the Board	March 15, 2019
/s/ Andrew Sassine Andrew Sassine	Chief Financial Officer and Director (*principal financial officer*)	March 15, 2019
/s/ Dr. Magda Marquet Dr. Magda Marquet	Director	March 15, 2019
/s/ James Barlow James Barlow	Director	March 15, 2019
/s/ Keith C. Kummerfeld Keith C. Kummerfeld	Vice President of Finance and Corporate Controller *(principal accounting officer)*	March 15, 2019

Exhibit 8.1

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March 15, 2019

Arcturus Therapeutics Holdings Inc.
10628 Science Center Drive, Suite 250
San Diego, CA 92121

Re: Registration Statement on Form S-4

Ladies and Gentlemen:

We have acted as counsel to Arcturus Therapeutics Holdings Inc., a newly-formed Delaware corporation ("Arcturus Delaware") in connection with the scheme of arrangement between Arcturus Delaware and Arcturus Therapeutics Ltd., an Israeli corporation classified as a U.S. corporation for purposes of U.S. federal income tax law ("Arcturus Israel") pursuant to which Arcturus Delaware will acquire 100% of the ordinary shares of Arcturus Israel and options to purchase ordinary shares of Arcturus Israel in exchange for Arcturus Delaware shares of common stock and options to purchase Arcturus Delaware shares of common stock, respectively (the "Arrangement"), pursuant to the terms of the Agreement, dated as of February 8, 2019 between Arcturus Israel and Arcturus Delaware (the "Exchange Agreement"). In addition, immediately after the Arrangement, Arcturus Israel may distribute ("Distribution") its subsidiary, Arcturus Therapeutics, Inc., a Delaware corporation, to Arcturus Delaware. For purposes of this opinion, we assume that if the Distribution occurs, it will occur close in time to, and as part of a plan of, the Arrangement.

This opinion is being delivered in connection with the registration statement on Form S-4 (as amended through the effective date thereof, the "Registration Statement"), which includes a proxy statement/prospectus/consent solicitation, filed by Arcturus Delaware with the U.S. Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Act"), on the date hereof, and in accordance with the requirements of Item 601(b)(8) of Regulation S-K under the Act. Unless otherwise indicated, each capitalized term used and not defined herein has the meaning ascribed to it in the Exchange Agreement.

In rendering our opinion set forth below, we have examined and relied upon, without independent investigation or verification, the accuracy and completeness both initially and continuing as of the Consummation Date, of the statements, facts, information, representations, covenants and agreements contained in originals or copies, certified or otherwise identified to our satisfaction, the Exchange Agreement, the Registration Statement and such other documents as we have deemed necessary or appropriate as a basis for the opinion set forth below, including officers' certificates from officers of Arcturus Delaware, dated as of March 15, 2019, and of Arcturus Israel, dated as of March 15, 2019 (collectively, the "Representation Letters"). For purposes of rendering our opinion, we have assumed that such statements, facts, information, representations, covenants and agreements are, and will continue to be up to and including the Consummation Date, accurate and complete without regard to any qualification as to knowledge. Our opinion assumes and is expressly conditioned on, among other things, the initial and continuing accuracy and completeness up to and including the Consummation Date of the statements, facts, information, representations, covenants and agreements set forth in the documents referred to above and the statements, representations, covenants and agreements made by Arcturus Delaware and Arcturus Israel, including those set forth in the Representation Letters.

In our examination, we have assumed (i) the genuineness of all signatures, (ii) the legal capacity of natural persons, (iii) the authenticity of all documents submitted to us as originals, (iv) the conformity to original documents and all documents submitted to us as certified or photostatic copies, (v) the authenticity of the originals of such documents, (vi) the necessary entity formation and continuing existence in the jurisdiction of formation, and the necessary licensing and qualification in all jurisdictions, of all parties to all documents, (vii) the enforceability (as limited by bankruptcy and other

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insolvency laws) and, with respect thereto and to any other matter herein to which relevant, any necessary entity power and authority, authorization, execution, authentication, payment and delivery of, under and with respect to all documents to which this opinion letter relates, (viii) that there is not any other agreement that modifies or supplements the agreements expressed in any document to which this opinion letter relates in a manner that affects the correctness of any opinion expressed below, and (ix) that there has been no mutual mistake of fact or misunderstanding, fraud, duress or undue influence in connection with any document. We also have assumed that any transactions related to the Arrangement or contemplated by the Exchange Agreement will be consummated in accordance with the terms and conditions of the Exchange Agreement and as described in the Registration Statement, that none of the terms or conditions therein will have been waived or modified in any respect prior to the Consummation Date and that the Arrangement will constitute a statutory procedure under Israeli law. Each assumption herein is made and relied upon with your permission and without independent investigation.

In rendering our opinion, we have considered applicable provisions of the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations promulgated thereunder (the "Regulations"), pertinent judicial authorities, rulings of the Internal Revenue Service (the "IRS") and such other authorities as we have considered relevant, in each case, in effect on the date hereof. It should be noted that such laws, Code, Regulations, judicial authorities, administrative interpretations and such other authorities are subject to change at any time and, in some circumstances, with retroactive effect. A change in any of the authorities upon which our opinion is based, or any variation or difference in any fact from those set forth or assumed herein or in the Registration Statement, the Exchange Agreement or the Representation Letters, could affect our conclusions herein. Moreover, there can be no assurance that our opinion will be accepted by the IRS or, if challenged, by a court.

Based solely upon and subject to the foregoing, and subject to the limitations, assumptions and caveats set forth herein, we are of the opinion that under current U.S. federal income tax law insofar as they purport to describe provisions of U.S. federal income tax law and as limited therein, the statements set forth under the heading "Taxation—Material U.S. Federal Income Tax Considerations of the Scheme of Arrangement to Holders of Arcturus-Israel Ordinary Shares" in the Registration Statement accurately describe the material U.S. federal income tax considerations of the Arrangement and the Distribution.

Except as expressly set forth above, we express no opinion to any party as to any tax consequences, whether U.S. federal, state, local or non-U.S., of the Arrangement or of any transaction related to or contemplated by the Arrangement. We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and to the references to our firm name therein. In giving this consent, we do not admit that we come within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the SEC thereunder.

This opinion is expressed as of the date hereof, and we are under no obligation to supplement or revise our opinion to reflect any legal developments or factual matters arising subsequent to the date hereof or the impact of any information, document, certificate, record, statement, representation, covenant or assumption relied upon herein that becomes incorrect or untrue.

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Very truly yours,

/s/ Dentons US LLP
DENTONS US LLP

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED ACCOUNTING FIRM

We consent to the reference to our firm under the caption “Experts” and to the use of our report dated March 15, 2019, with respect to the consolidated financial statements of Arcturus Therapeutics Ltd. and its subsidiaries included in the Registration Statement (Form S-4) and related proxy statement/prospectus of Arcturus Therapeutics Holdings Inc. dated March 15, 2019.

/s/ Ernst & Young LLP
San Diego, California
March 15, 2019

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED ACCOUNTING FIRM

We consent to the reference to our firm under the caption "Experts" and to the use of our reports dated May 14, 2018, with respect to the consolidated financial statements of Arcturus Therapeutics Ltd. included in the Registration Statement (Form S-4) and related Proxy Statement/Prospectus of Arcturus Therapeutics Holdings Inc. dated March 15, 2019.

/s/ Kost Forer Gabbay & Kasierer
KOST FORER GABBAY & KASIERER
A member of Ernst & Young global

Tel-Aviv, Israel
March 15, 2019