

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

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

ARCTURUS THERAPEUTICS HOLDINGS INC.

(Name of Registrant as Specified in Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
 Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

1) Title of each class of securities to which transaction applies:

2) Aggregate number of securities to which transaction applies:

3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11
(set forth the amount on which the filing fee is calculated and state how it was determined)

4) Proposed maximum aggregate value of transaction:

5) Total fee paid:

Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

1) Amount Previously Paid:

2) Form, Schedule or Registration Statement No.:

3) Filing Party:

4) Date Filed:



**10628 Science Center Drive, Suite 250
San Diego, California 92121**

To our Stockholders:

We are pleased to invite you to attend a special meeting of stockholders of Arcturus Therapeutics Holdings Inc. (the “Special Meeting”), to be held on [MEETING DATE], 2020 at [MEETING TIME] Pacific Time, at <https://www.cstproxy.com/arcturusrx/sm2020>. The Special Meeting will be a completely virtual meeting of stockholders, which will be conducted exclusively on the Internet. No physical meeting will be held.

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

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

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

Sincerely,

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

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

San Diego, California

[MAILING DATE], 2020



ARCTURUS THERAPEUTICS HOLDINGS INC.

**10628 Science Center Drive, Suite 250
San Diego, California 92121**

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

Time and Date [MEETING TIME] Pacific Time, on [MEETING DATE], 2020.

Place Virtually via the Internet at <https://www.cstproxy.com/arcturusrx/sm2020>. No physical meeting will be held.

Items of Business

- (1) To amend our Certificate of Incorporation to increase the number of shares of common stock we are authorized to issue from 30,000,000 shares to 60,000,000 shares (“Proposal 1”);
- (2) To approve the adjournment of the Special Meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt Proposal 1; and
- (3) To transact other business that may properly come before the Special Meeting.

Adjournments and Postponements Any action on the items of business described above may be considered at the Special Meeting at the time and on the date specified above or at any time and date to which the Special Meeting may be properly adjourned or postponed.

Record Date September 18, 2020. Only stockholders of record of our common stock as of September 18, 2020 are entitled to notice of and to vote at the Special Meeting.

Meeting Admission You are invited to virtually attend the Special Meeting if you are a stockholder of record or a beneficial owner of shares of our common stock, in each case, as of September 18, 2020. You may attend the Special Meeting and vote during the Special Meeting by visiting <https://www.cstproxy.com/arcturusrx/sm2020> and using your control number to enter the Special Meeting. If you are not a stockholder of record but hold shares as a beneficial owner in street name, you may be required to provide proof of beneficial ownership.

Voting **Your vote is very important.** You may vote by proxy over the Internet, by telephone, or by mail by following the instructions on the proxy card or voting instruction card.

For specific instructions on how to vote your shares, please refer to the section entitled “*Questions and Answers About the Proxy Materials and Special Meeting*” in the accompanying proxy statement.

By order of the Board of Directors,

/s/ Dr. Peter Farrell

Dr. Peter Farrell
Chairman of the Board
San Diego, California
[MAILING DATE], 2020

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ARCTURUS THERAPEUTICS HOLDINGS INC. PROXY STATEMENT

FOR A SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD ON [MEETING DATE], 2020

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

QUESTIONS AND ANSWERS
ABOUT THE PROXY MATERIALS AND SPECIAL MEETING

Why am I receiving these materials?

This proxy statement and the enclosed form of proxy are furnished in connection with the solicitation of proxies by our Board of Directors (the “Board”) for use at a special meeting of stockholders of Arcturus Therapeutics Holdings Inc., a Delaware corporation, and any postponements or adjournments thereof. The Special Meeting will be held on [MEETING DATE], 2020 at [MEETING TIME] Pacific Time, at <https://www.cstproxy.com/arcturusrx/sm2020>.

Due to the continuing public health impact of the coronavirus outbreak and to support the health and well-being of our employees, stockholders, and our community, the Special Meeting will be a completely virtual meeting of stockholders, which will be conducted exclusively online at <https://www.cstproxy.com/arcturusrx/sm2020>.

Stockholders are invited to attend the Special Meeting and are requested to vote on the items of business described in this proxy statement. The proxy statement is being mailed on or about [MAILING DATE], 2020 to all stockholders entitled to vote at the Special Meeting.

Who may vote at the Special Meeting?

Only stockholders of record as of the close of business on September 18, 2020, the record date, are entitled to vote at the Special Meeting. As of the record date, there were 24,473,002 shares of our common stock issued and outstanding, held by 14 holders of record.

How do I gain admission to the Special Meeting or vote my shares at the Special Meeting?

You are entitled to attend the Special Meeting only if you were a stockholder of record as of the record date for the Special Meeting, which was September 18, 2020, or you hold a valid proxy for the Special Meeting.

Registered Stockholders

If your shares are registered in your name with Arcturus’ transfer agent and you wish to attend the online-only virtual meeting, go to <https://www.cstproxy.com/arcturusrx/sm2020>, enter the control number you received on your proxy card or notice of the meeting and click on the “Click here to preregister for the online meeting” link at the top of the page. Just prior to the start of the meeting you will need to log back into the meeting site using your control number. Pre-registration is recommended but is not required in order to attend.

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

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

What am I voting on?

You are being asked to vote on (i) the proposed amendment of our Certificate of Incorporation to increase the number of shares of common stock we are authorized to issue from 30,000,000 shares to 60,000,000 shares, and (ii) the adjournment of the Special Meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt Proposal 1.

What if other matters are properly brought before the Special Meeting?

As of the date of this proxy statement, we are not aware of any other matters that will be presented for consideration at the Special Meeting. If any other matters are properly brought before the Special Meeting, the persons named as proxies will be authorized to vote or otherwise act on those matters in accordance with their judgment.

How does the Board recommend that I vote?

Our Board recommends that you vote your shares **“FOR”** the amendment of our Certificate of Incorporation, and **“FOR”** the adjournment of the Special Meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt Proposal 1.

Can I vote my shares without attending the Special Meeting?

Stockholder of Record: Shares Registered in Your Name

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

1. To vote by mail, simply mark your proxy, date and sign it, and return it to the Company in the postage-paid envelope provided.
2. To vote by telephone or Internet, follow the instructions on the proxy card. Telephone voting is available 24 hours a day, 7 days a week, until 11:59 p.m., Eastern time, on [PRIOR DAY], 2020. Internet voting prior to the Special Meeting is available 24 hours a day, 7 days a week, until 11:59 p.m., Eastern time, on [PRIOR DAY], 2020.

The method by which you vote now will in no way limit your right to vote electronically at the Special Meeting if you later decide to attend.

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

As discussed above, if you are a beneficial owner, you may not vote your shares virtually at the Special Meeting unless you obtain a legal proxy from your broker, bank or other nominee.

Can I change my vote or revoke my proxy?

Stockholder of Record: Shares Registered in Your Name.

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

- entering a new vote by Internet or telephone (until the applicable deadline for each method as set forth above);
- returning a later-dated proxy card (which automatically revokes the earlier proxy);
- providing a written notice of revocation to our corporate secretary at Arcturus Therapeutics Holdings Inc., 10628 Science Center Drive, Suite 250, San Diego, California 92121, Attn: Corporate Secretary; or
- attending the Special Meeting and voting virtually.

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

What is the effect of giving a proxy?

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

How many votes do I have?

Each stockholder will be entitled to one vote for each share of our common stock held by them on the record date.

What is the quorum requirement for the Special Meeting?

A quorum is the minimum number of shares required to be present or represented at the Special Meeting for the meeting to be properly held under our bylaws and Delaware law. Holders of at least 33.33% of the voting power of our outstanding common stock entitled to vote at the Special Meeting must be present in person or represented by proxy for us to hold and transact business at the Special Meeting. On the record date, there were 24,473,002 shares outstanding and entitled to vote. Thus, the holders of at least 8,157,668 shares must be present in person or represented by proxy at the Special Meeting to have a quorum.

Abstentions are counted as present and entitled to vote for purposes of determining a quorum. If there is no quorum, the meeting may be adjourned to another date by the chairman of the meeting or the holders of a majority of the voting power present in person or represented by proxy at the Special Meeting and entitled to vote.

What are the effects of abstentions?

An abstention represents a stockholder's affirmative choice to decline to vote on a proposal. If a stockholder indicates on its proxy card that it wishes to abstain from voting its shares, or if a broker, bank or other nominee holding its customers' shares of record causes abstentions to be recorded for shares, these shares will be considered present and entitled to vote at the Special Meeting. As a result, abstentions will be counted for purposes of determining the presence or absence of a quorum and will also count as votes against Proposal 1 and will have no effect on the other proposal.

What is the voting requirement to approve the proposals?

The amendment of our Certificate of Incorporation requires the approval of at least a majority of the capital stock entitled to vote. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions will count towards the quorum requirement for the Special Meeting and will have the same effect as a vote against the proposal.

The adjournment of the Special Meeting, if necessary or appropriate, to permit further solicitation of additional proxies if there are not sufficient votes at the time of the Special Meeting to approve Proposal 1 requires the affirmative "FOR" vote of a majority of those shares cast on the proposal. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions will count towards the quorum requirement for the Special Meeting, but will not be counted as votes "FOR" or "AGAINST" and will not affect the outcome of this proposal.

Who will count the votes?

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

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

Stockholder of Record: Shares Registered in Your Name. If you are a stockholder of record and you submit a proxy but you do not provide voting instructions, your shares will be voted "FOR" the amendment of our Certificate of Incorporation, and "FOR" the adjournment of the Special Meeting, if necessary or appropriate, to permit further solicitation of additional proxies if there are not sufficient votes at the time of the Special Meeting to approve Proposal 1.

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

Beneficial Owner: Shares Registered in the Name of a Broker, Bank or Other Nominee. If you are the beneficial owner and hold your shares in street name and do not provide your bank, broker or other nominee that holds your shares with voting instructions, the bank, broker or other nominee will determine if it has the discretionary authority to vote on the particular matter. Your bank, broker or other nominee may vote your shares in its discretion on "routine" matters. The proposals to be considered at the Special Meeting are considered a "routine" matter in accordance with the NYSE rules applicable to its member brokers. This means that your bank, broker or other nominee may vote in its discretion on the proposal on your behalf if you have not furnished voting instructions.

How can I contact Arcturus' transfer agent?

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

How are proxies solicited for the Special Meeting, and who is paying for such solicitation?

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

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

Where can I find the voting results of the Special Meeting?

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

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

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

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

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

Arcturus Therapeutics Holdings Inc.
Attention: Investor Relations
10628 Science Center Drive, Suite 250
San Diego, California 92121

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

PROPOSAL NUMBER 1

APPROVE AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO INCREASE NUMBER OF AUTHORIZED SHARES OF CAPITAL STOCK

At the Special Meeting, we will ask our stockholders to approve a proposal to amend our Certificate of Incorporation to increase the number of authorized shares of common stock. On September 8, 2020, the Board approved a proposal to amend our Certificate of Incorporation to increase the number of authorized shares of our capital stock from 40,000,000 Shares, comprised of 30,000,000 shares of common stock and 10,000,000 shares of preferred stock, to 70,000,000 shares, comprised of 60,000,000 shares of common stock and 10,000,000 shares of preferred stock. On September 29, 2020, there were 24,473,002 shares of common stock issued and outstanding and 5,526,998 shares of common stock reserved for issuance. Accordingly, no shares of the total number of common stock currently authorized remain available for issuance or may be reserved for issuance prior to any amendment to increase the authorized shares of capital stock.

Form of the Amendment

The proposed amendment (the "Amendment") would amend and restate Article IV.A of our Certificate of Incorporation to read in its entirety as follows:

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 Seventy Million (70,000,000) shares. Sixty Million (60,000,000) 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).

Background and Reasons for the Amendment

Our Certificate of Incorporation currently authorizes the issuance of up to 30,000,000 shares of common stock and 10,000,000 shares of preferred stock. As of the close of business on September 29, 2020, there were approximately 24,473,002 shares of common stock issued and outstanding and 5,526,998 shares reserved for issuance pursuant to outstanding option awards and our Amended & Restated 2019 Omnibus Equity Incentive Plan and our 2020 Employee Stock Purchase Plan, leaving no balance of shares of common stock available for issuance.

If the Amendment is approved by stockholders, upon its effectiveness we will have a total of 60,000,000 authorized shares of common stock, with approximately 24,473,002 shares of common stock issued and outstanding as of the date of the Proxy Statement, and approximately 5,526,998 shares reserved for issuance, leaving a balance of 30,000,000 shares of common stock authorized and not reserved for any specific purpose.

Purpose of the Amendment

The Board believes it is in the best interest of the Company to increase the number of authorized shares of our capital stock in order to give the Company greater flexibility in considering and planning for future general corporate needs, including, but not limited to, the offer and sale of common stock in one or more public offerings or private placements, the grant of common stock or warrants, options or other convertible securities in one or more strategic transactions, stock dividends, grants under equity compensation plans, stock splits, as well as other general corporate transactions. The Board believes that additional authorized shares of capital stock will enable the Company to take timely advantage of market conditions and favorable financing and acquisition opportunities that become available to the Company.

The Company has no current plan, commitment, arrangement, understanding or agreement regarding the issuance of additional shares of capital stock from the additional shares to be authorized herein. The authorized but unissued shares will only be issued at the direction of the Board, and if required by applicable law or Nasdaq regulation, upon separate stockholder approval.

Rights of Additional Authorized Shares

Any newly authorized shares of common stock will be identical to the shares of common stock now authorized and outstanding. The amendment will not affect the rights of current holders of common stock, none of whom have preemptive or similar rights to acquire the newly authorized shares.

Potential Adverse Effects of the Amendment

Adoption of the amendment will have no immediate dilutive effect on the proportionate voting power or other rights of the Company's existing stockholders. The Board has no current plan to issue shares from the additional authorized shares provided by the Amendment. However, any future issuance of additional authorized shares of our common stock, at the future direction of the Board, generally without the requirement of stockholder approval (unless specifically required by applicable law or Nasdaq regulation) may, among other things, dilute the earnings per share of common stock and the equity and voting rights of those holding common stock at the time such additional shares are issued.

In addition to the general corporate purposes mentioned above, an increase in the number of authorized shares of common stock may make it more difficult to, or discourage an attempt to, obtain control of the Company by means of a takeover bid that the Board determines is not in the best interest of the Company and its stockholders. However, the Board does not intend or view the proposed increase in the number of authorized shares of common stock as an anti-takeover measure and is not aware of any attempt or plan to obtain control of the Company.

Potential Anti-Takeover Effects

The Amendment could adversely affect the ability of third parties to effect a takeover or a change in control by, for example, permitting issuances that would dilute the ownership of a person seeking to effect a change in the composition of our Board or contemplating a tender offer or other transaction that the Board determines is not in our best interests or in the best interests of our stockholders. The Board's ability to issue substantial amounts of common stock without the need for stockholder approval, except as may be required by law or regulation, upon such terms and conditions as our Board may determine from time to time in the exercise of its business judgment, may, among other things, be used to create voting impediments with respect to a change in control or to dilute the stock ownership of stockholders seeking to obtain control of the Company. The issuance of common stock, while providing desirable flexibility in connection with potential financings and other corporate transactions, may have the effect of discouraging, delaying or preventing a change in control of the Company. Our Board, however, does not intend or view the Amendment as an anti-takeover measure, nor does it contemplate its use in this manner at any time in the foreseeable future.

Appraisal Rights

Pursuant to the Delaware General Corporation Law, stockholders are not entitled to appraisal rights with respect to the Amendment.

Effectiveness of Amendment

If the Amendment is adopted, it will become effective upon the filing of a certificate of amendment to our Certificate of Incorporation with the Secretary of State of the State of Delaware.

Required Vote

The amendment of our Certificate of Incorporation requires the affirmative "FOR" vote of at least a majority of the outstanding common stock entitled to vote thereon. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions have the same effect as a vote against the proposal.

Board Recommendation

Our Board recommends a vote "FOR" the amendment of our Certificate of Incorporation to increase the number of shares of common stock we are authorized to issue from 30,000,000 shares to 60,000,000 shares.

PROPOSAL NUMBER 2

APPROVAL OF ANY ADJOURNMENT OF THE SPECIAL MEETING, IF NECESSARY OR APPROPRIATE, TO PERMIT FURTHER SOLICITATION OF ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES AT THE TIME OF THE SPECIAL MEETING TO APPROVE PROPOSAL NUMBER 1

If at the Special Meeting, the number of shares of common stock present or represented and voting in favor of Proposal 1 is insufficient to approve the proposal, our management may move to adjourn the Special Meeting in order to enable our Board to continue to solicit additional proxies in favor of Proposal 1. In that event, you will be asked to vote only upon the adjournment, postponement or continuation proposal and not on any other proposals.

In this proposal, we are asking you to authorize the holder of any proxy solicited by our Board to vote in favor of adjourning, postponing or continuing the Special Meeting and any later adjournments. If our stockholders approve the adjournment, postponement or continuation proposal, we could adjourn, postpone or continue the Special Meeting, and any adjourned session of the Special Meeting, to use the additional time to solicit additional proxies in favor of Proposal 1, including the solicitation of proxies from stockholders that have previously voted against the proposal. Among other things, approval of the adjournment, postponement or continuation proposal could mean that, even if proxies representing a sufficient number of votes against Proposal 1 have been received, we could adjourn, postpone or continue the Special Meeting without a vote on Proposal 1 and seek to convince the holders of those shares to change their votes to votes in favor of the approval of Proposal 1.

Required Vote

Approval of any adjournment of the Special Meeting, if necessary or appropriate, to permit further solicitation of additional proxies if there are not sufficient votes at the time of the Special Meeting to approve Proposal 1 requires the affirmative "FOR" vote of a majority of those shares cast on the proposal. You may vote "FOR," "AGAINST," or "ABSTAIN" on this proposal. Abstentions have no effect on this proposal.

Board Recommendation

Our Board recommends a vote "FOR" the adjournment of the Special Meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt Proposal 1.

SECURITY OWNERSHIP

The following table sets forth information with respect to the beneficial ownership of our common stock as of September 18, 2020 by:

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

The beneficial ownership of shares of common stock is determined in accordance with the rules of the SEC and generally includes any shares of common stock over which a person exercises sole or shared voting or investment power, or the right to receive the economic benefit of ownership. For purposes of the table below, we deem shares subject to options or warrants that are currently exercisable or exercisable within 60 days of September 18, 2020, 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 24,473,002 shares of common stock outstanding as of September 18, 2020.

The following table sets forth information regarding the beneficial ownership by each person or entity known to beneficially own more than 5% of our common stock as of September 18, 2020. Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares shown to be beneficially owned by them, based on information provided to us by such stockholders. Unless otherwise noted below, each beneficial owner's address is: c/o Arcturus Therapeutics Holdings Inc., 10628 Science Center Drive, Suite 250, San Diego, California, 92121.

Shares of Common Stock Beneficially Owned

<i>5% or Greater Stockholders</i>	Common Stock Beneficially Owned	
	Number	Percentage
Ultragenyx Pharmaceutical Inc. ⁽¹⁾	3,000,000	12.3%
HealthCor Management L.P. ⁽²⁾	1,584,466	6.5%
ARK Investment Management LLC ⁽³⁾	1,383,756	5.7%
Directors and Executive Officers		
Joseph E. Payne ⁽⁴⁾	1,566,347	6.4%
Andy Sassine ⁽⁵⁾	365,318	1.5%
Padmanabh Chivukula ⁽⁶⁾	783,381	3.2%
Steven Hughes	0	*
Peter C Farrell ⁽⁷⁾	148,065	*
Edward. W. Holmes ⁽⁸⁾	30,000	*
Magda Marquet ⁽⁷⁾	75,220	*
James Barlow ⁽⁷⁾	62,500	*
Karah Parschauer ⁽⁸⁾	30,000	*
All directors and executive officers as a group (10 persons)	3,060,831	12.5%

* Represents beneficial ownership of less than 1% of our outstanding shares of common stock.

(1) Based on an amended Schedule 13D filed with the SEC on May 22, 2020. The address of Ultragenyx Pharmaceutical Inc. is 60 Leveroni Court, Novato, California 94949.

(2) Based on a Schedule 13D filed with the SEC on September 11, 2020. The address of HealthCor Management L.P. is 55 Hudson Yards, 28th Floor, New York, NY 10001.

(3) Based solely on Form 13F filed as of December 31, 2018. The address of ARK Investment Management LLC is 3 East 28th Street, 7th Floor, New York, NY 10016.

(4) 91,250 shares exercisable are included.

(5) 97,083 shares exercisable are included.

(6) 60,833 shares exercisable are included.

(7) 52,500 shares exercisable are included.

(8) 30,000 shares exercisable are included. Does not include the 3,000,000 shares of common stock owned by Ultragenyx Pharmaceutical Inc., for which Ms. Parschauer serves as Executive Vice President and General Counsel.

OTHER MATTERS

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

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

Company Website

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

THE BOARD OF DIRECTORS

San Diego, California
[MAILING DATE], 2020

YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.

Vote by Internet - QUICK * EASY**
IMMEDIATE - 24 Hours a Day, 7 Days a Week or by Mail

ARCTURUS THERAPEUTICS HOLDINGS INC.

Your Internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card. Votes submitted electronically over the Internet must be received by 11:59 p.m., Eastern Time, on [], 2020.



INTERNET –
www.cstproxyvote.com

Use the Internet to vote your proxy. Have your proxy card available when you access the above website. Follow the prompts to vote your shares.



Vote at the Meeting –

If you plan to attend the virtual online special meeting, you will need your 12 digit control number to vote electronically at the special meeting. To attend the special meeting, visit: <http://cstproxy.com/arcturusrx/sm2020>



MAIL – Mark, sign and date your proxy card and return it in the postage-paid envelope provided.

**PLEASE DO NOT RETURN THE PROXY CARD
IF YOU ARE VOTING ELECTRONICALLY.**

PROXY

▲ FOLD HERE • DO NOT SEPARATE • INSERT IN ENVELOPE PROVIDED ▲

Please mark
your votes
like this



The Board of Directors recommends you vote FOR Proposals 1 and 2.

1. To approve an amendment to the Company's Certificate of Incorporation to increase the number of shares of common stock we are authorized to issue from 30,000,000 shares to 60,000,000 shares.

FOR AGAINST ABSTAIN

2. To approve the adjournment of the Special Meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt Proposal 1.

FOR AGAINST ABSTAIN

In their discretion, the proxies are authorized to vote upon such other matters as may properly come before the Special Meeting or any adjournment or postponement thereof.

Name _____ Signature _____

Name _____ Signature _____

CONTROL NUMBER

Signature _____

Signature, if held jointly _____

Date _____, 2020.

Note: Please sign exactly as your name appears on this Proxy. When shares are held jointly, each holder should sign. When signing as an executor, administrator, trustee, or guardian, please give the full title as such. If the signer is a corporation, please sign the full corporate name by a duly authorized officer, giving full title as such. If the signer is a partnership, please sign in partnership name by authorized person.

The Proxy Statement is available at:
<https://www.cstproxy.com/arcturusrx/sm2020>

▲ FOLD HERE • DO NOT SEPARATE • INSERT IN ENVELOPE PROVIDED ▲

PROXY

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

ARCTURUS THERAPEUTICS HOLDINGS INC.

The undersigned hereby appoints Dr. Peter Farrell and Joseph E. Payne, each of them, agents and proxies of the undersigned, with full power of substitution to each of them, to represent and to vote on behalf of the undersigned all the Common Stock of Arcturus Therapeutics Holdings Inc. (the “Company”) which the undersigned is entitled to vote at the Special Meeting of Stockholders (the “Meeting”) to be held at [] (Pacific Time) on [], 2020 and will be an exclusively virtual meeting, and at any adjournments or postponements thereof, upon the following matters, which are more fully described in the Proxy Statement relating to the Meeting.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED HEREIN BY THE UNDERSIGNED. IF NO DIRECTION IS MADE WITH RESPECT TO ANY MATTER, THIS PROXY WILL BE VOTED FOR PROPOSALS 1 AND 2, ANY AND ALL PROXIES HERETOFORE GIVEN BY THE UNDERSIGNED ARE HEREBY REVOKED.

(Continued, and to be marked, dated and signed, on the other side)