

The information in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to these securities has become effective by rule of the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting offers to buy these securities, in any state or other jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 15, 2020

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus dated July 29, 2019)

Shares



Arcturus Therapeutics Holdings Inc.

Common Stock

We are offering _____ shares of our common stock.

Our common stock is listed on the Nasdaq Global Market under the symbol "ARCT" On April 14, 2020, the last reported sale price of our common stock on the Nasdaq Global Market was \$18.05 per share.

Investing in our securities involves significant risks. Please read the information contained in or incorporated by reference under the heading "Risk Factors" beginning on page S-5 of this prospectus supplement, and under similar headings in other documents filed after the date hereof and incorporated by reference into this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Public offering price	\$ _____	\$ _____
Underwriting discounts and commissions(1)	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____

(1) We have agreed to reimburse the underwriters for certain expenses. We refer you to "Underwriting" beginning on page S-17 of this prospectus supplement for additional information regarding total underwriting compensation.

Delivery of the shares of common stock is expected to be made on or about _____, 2020.

We have granted the underwriters an option for a period of 30 days to purchase an additional _____ shares of our common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be \$ _____, and the total proceeds to us, before expenses, will be \$ _____.

Sole Book-Running Manager

Guggenheim Securities

The date of this prospectus supplement is _____, 2020.

TABLE OF CONTENTS

Prospectus Supplement

	<u>Page</u>
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
PROSPECTUS SUPPLEMENT SUMMARY	S-2
THE OFFERING	S-4
RISK FACTORS	S-5
NOTE REGARDING FORWARD-LOOKING STATEMENTS	S-9
USE OF PROCEEDS	S-11
DIVIDEND POLICY	S-12
DILUTION	S-12
MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS	S-13
UNDERWRITING	S-17
LEGAL MATTERS	S-22
EXPERTS	S-22
WHERE YOU CAN FIND MORE INFORMATION	S-22
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	S-22

Prospectus

	<u>Page</u>
ABOUT THIS PROSPECTUS	1
PROSPECTUS SUMMARY	2
RISK FACTORS	3
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	3
USE OF PROCEEDS	4
DESCRIPTION OF CAPITAL STOCK WE MAY OFFER	4
DESCRIPTION OF DEBT SECURITIES WE MAY OFFER	7
DESCRIPTION OF UNITS WE MAY OFFER	16
PLAN OF DISTRIBUTION	18
LEGAL MATTERS	20
EXPERTS	20
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	20

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a shelf registration statement on Form S-3 (File No. 333-232281) that we filed with the Securities and Exchange Commission, or SEC, on June 21, 2019 and was declared effective by the SEC on July 29, 2019, pursuant to which we may from time to time offer various securities in one or more offerings.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein or therein. The second part, the accompanying prospectus, including the documents incorporated by reference into the accompanying prospectus, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or any document incorporated by reference herein or therein filed prior to the date of this prospectus supplement, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

Neither we nor the underwriters have authorized anyone to provide information different from that contained in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in this offering. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we nor the underwriters take any responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. Neither the delivery of this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in this offering, nor the sale of our common stock means that information contained in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in this offering, is correct after their respective dates. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering in making your investment decision.

This prospectus supplement does not contain all of the information that is important to you. You should also read and consider the information in the documents to which we have referred you in the sections entitled “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” in this prospectus supplement. You should rely only on the information contained or incorporated by reference in this document. You should assume that the information in this prospectus supplement and the accompanying prospectus, as well as the information we have filed with the SEC and incorporated by reference in this document, is accurate only as of its date or the date which is specified in those documents.

We are offering to sell, and seeking offers to buy, and the underwriters are soliciting offers to buy, these securities only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus supplement and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference herein are the property of their respective owners.

In this prospectus supplement, unless otherwise indicated, the terms the “Company,” “Arcturus Therapeutics,” “we,” “us” and “our” refer to Arcturus Therapeutics Holdings Inc., a Delaware corporation, and its predecessors and consolidated subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement or the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before investing in our securities. The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information and financial statements and notes thereto appearing elsewhere in this prospectus supplement and the accompanying prospectus. Before you decide to invest in our securities, to fully understand this offering and its consequences to you, you should carefully read the entire prospectus supplement carefully, including the matters set forth under the caption “Risk Factors” beginning on page S-5 of this prospectus supplement and page 3 of the accompanying prospectus, and the consolidated financial statements and related notes included or incorporated by reference in this prospectus supplement, the accompanying prospectus and the other documents incorporated by reference herein and therein.

Business Overview of Arcturus Therapeutics Holdings Inc.

Arcturus Therapeutics is an RNA medicines company focused on significant opportunities in rare diseases and vaccines with a current focus on liver and respiratory diseases. In addition to our internal mRNA platform, our proprietary lipid nanoparticle delivery system, LUNAR®, is designed to enable multiple nucleic acid 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 five drug candidates 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 200 proprietary lipids designed 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 187 patents and patent applications, issued in the United States, China, Europe, Japan and other countries.

The Company’s principal executive offices are located in San Diego, California. We believe 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 develop and deliver on the next generation of nucleic medicines.

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, megatalas and meganucleases-gene editing of errant genes.

Recent Developments

In April 2020, our LUNAR-OTC investigational new drug (“IND”) submission to the U.S. Food and Drug Administration (“FDA”) for a Phase 1b study in patients with OTC deficiency was allowed to proceed by the FDA, and an additional Clinical Trial Application (CTA) for a Phase 1 study in healthy volunteers was approved by the New Zealand Medicines and Medical Devices Safety Authority (Medsafe). We also announced that the primary endpoint for both studies includes evaluation of safety and tolerability. Multiple biomarkers, including ureagenesis assay, plasma OTC activity, plasma ammonia and orotic acid in the urine, are being evaluated as exploratory endpoints. We further announced that the program plans to enroll up to 30 healthy volunteers in the Auckland Clinical Studies (ACS) site in New Zealand, and up to 12 OTC-deficient patients recruited across several sites in the U.S. OTC deficiency is a life-threatening genetic disease that results in high blood ammonia levels and can cause seizures, coma, and death in untreated patients.

In April 2020, we announced plans to initiate a first-in-human clinical trial in the summer of 2020 in Singapore for our pending COVID-19 vaccine, also known as LUNAR-COV19. Under the guidance of the Singapore Health Sciences Authority (HSA), the trial plans to enroll up to 76 healthy volunteer adults including elderly individuals, with follow-up over several months to evaluate extent and duration of immune response. This trial follows the March 2020 grant (the “Grant”) from the Singapore Economic Development Board, or EDB, to support the co-development of a COVID-19 vaccine with the National University of Singapore in conjunction with a partnership with Duke NUS-Medical School. The grant provides for up to approximately US\$10 million using the March 4, 2020 exchange rate in grants to support the development of the vaccine. A portion of the Grant will be paid by the EDB in advance and the remainder of the Grant will be paid to us incrementally upon the achievement of certain milestones related to the progress of the development of the vaccine, as set forth in the agreement under which we received the Grant. We agreed to pay Duke NUS-Medical School a royalty based on annual net sales of the vaccine in markets or jurisdictions outside of Singapore. We only intend to seek approval initially of LUNAR-COV19 from the HSA and will not be working initially with the FDA. Accordingly, we do not anticipate sales of the vaccine, if successfully developed, to occur in the United States.

We established Friday, June 5, 2020 as the date of our 2020 Annual Meeting of Stockholders (the “2020 Annual Meeting”). The record date for the determination of our stockholders entitled to receive notice of and to vote at the 2020 Annual Meeting is the close of business on Wednesday, April 8, 2020.

Financial Update

As of March 31, 2020 we estimate that we had approximately \$59.5 million of cash and cash equivalents. Our consolidated financial statements as of and for the three months ended March 31, 2020 are not expected to be available until after this offering is completed. Our estimated cash and cash equivalents have been prepared by, and are the responsibility of, our management. Neither the Company’s independent auditors nor any other independent accountants have audited, reviewed, compiled, examined, or performed any procedures with respect to this estimate as of and for the three months ended March 31, 2020 contained herein, nor have such persons expressed any opinion or any other form of assurance on such information and, as such, such persons assume no responsibility for, and disclaim any association with, such information.

Corporate Information

The Company was founded in 2013 under the name Alcobra Ltd. On November 15, 2017, Alcobra Ltd. acquired Arcturus Therapeutics, Inc., or 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., or Arcturus Ltd.

On June 12, 2019, Arcturus Ltd. redomiciled as a Delaware corporation following the completion of the actions contemplated by an Exchange Agreement dated as of February 8, 2019, between Arcturus Ltd. and the Company. Following the redomiciliation, the Company became the successor issuer to Arcturus Ltd. and each of Arcturus Ltd. and Arcturus Inc. became wholly-owned subsidiaries of the Company.

Our principal executive offices are located at 10628 Science Center Drive, Suite 250, San Diego, California 92121, and our telephone number is (858) 900-2660. Our website is located at <https://arcturusrx.com>. We do not incorporate by reference into this prospectus supplement the information on, or accessible through, our website, and you should not consider it as part of this prospectus supplement. Our common stock trades on The Nasdaq Global Market under the symbol “ARCT”.

THE OFFERING

Common stock offered by us:
Option to purchase additional shares.

shares

We have granted the underwriters an option for a period of up to 30 days from the date of this prospectus supplement to purchase up to an additional shares of our common stock at the public offering price less the underwriting discounts and commissions.

Common stock to be outstanding after the offering:

shares (or shares assuming the underwriters exercise in full their option to purchase additional shares).

Use of proceeds:

We currently expect to use the net proceeds from this offering for working capital and general corporate purposes. See "Use of Proceeds" on page S-11 of this prospectus supplement.

Nasdaq Global Market symbol:

ARCT

Risk factors:

An investment in our securities involves a high degree of risk. See "Risk Factors" beginning on page S-5 of this prospectus supplement, page 3 of the accompanying prospectus and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider carefully when making an investment decision.

The number of shares our common stock to be outstanding after the offering is based on 15,137,964 shares of our common stock outstanding as of December 31, 2019 and excludes 2,249,076 shares issuable upon exercise of currently outstanding options or other rights to purchase our common stock.

Except as otherwise indicated herein, all information in this prospectus supplement, including the number of shares that will be outstanding after this offering, does not assume or give effect to the exercise of the underwriters' option to purchase additional shares in this offering.

RISK FACTORS

Investment in our securities involves risks. Prior to making a decision about investing in our securities, you should consider carefully all of the information included in and incorporated by reference or deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus, including the risk factors incorporated by reference herein from our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the Securities and Exchange Commission, or SEC, on March 16, 2020, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this prospectus supplement and that are incorporated by reference in the this prospectus supplement. Each of these risk factors could have a material adverse effect on our business, results of operations, financial position or cash flows, which may result in the loss of all or part of your investment. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations. If any of these risks actually occur, our business and financial results could be harmed. In that case, the trading price of our common stock or other securities could decline.

Risks Related to the Discovery and Development of Product Candidates

Our pursuit of a COVID-19 vaccine candidate is at an early stage. We may be unable to produce a vaccine that successfully treats the virus in a timely manner, if at all.

In response to the global outbreak of coronavirus, in March 2020, we entered into a partnership with Duke-NUS Medical School in Singapore to develop a novel coronavirus (COVID-19) vaccine for Singapore. Our development of the vaccine is in early stages, and we may be unable to produce a vaccine that successfully treats the virus in a timely manner, if at all. We are also committing financial resources and personnel to the development of a COVID-19 vaccine which may cause delays in or otherwise negatively impact our other development programs, despite uncertainties surrounding the longevity and extent of coronavirus as a global health concern. Our business could be negatively impacted by our allocation of significant resources to a global health threat that is unpredictable and could rapidly dissipate or against which our vaccine, if developed, may not be partially or fully effective. In addition, another party may be successful in producing a more efficacious vaccine or other treatment for COVID-19 which may also lead to the diversion of governmental and quasi-governmental funding away from us and toward other companies.

If a coronavirus outbreak occurs and is classified as a pandemic or large epidemic by public health authorities, it is possible that one or more government entities may take actions that directly or indirectly have the effect of abrogating some of our rights or opportunities. If we were to develop a COVID-19 vaccine, the economic value of such a vaccine to us could be limited.

Various government entities, including the U.S. government, are offering incentives, grants and contracts to encourage additional investment by commercial organizations into preventative and therapeutic agents against coronavirus, which may have the effect of increasing the number of competitors and/or providing advantages to known competitors. Accordingly, there can be no assurance that we will be able to successfully establish a competitive market share for our COVID-19 vaccine, if any.

The recent coronavirus outbreak has caused interruptions or delays of our business plan and may have a significant adverse effect on our business.

In December 2019, a strain of coronavirus, COVID-19, was reported to have surfaced in Wuhan, China, and on March 12, 2020, the World Health Organization declared COVID-19 to be a pandemic. In an effort to contain and mitigate the spread of COVID-19, many countries, including the United States, Canada and China, have imposed unprecedented restrictions on travel, quarantines, and other public health safety measures. The extent to which the pandemic may impact our business will depend on future developments, which are highly uncertain and cannot be predicted, but the development of clinical supply materials could be delayed and enrollment of patients in our study for LUNAR-OTC and LUNAR-COV19 may be delayed or suspended, as hospitals and clinics in areas where we are conducting trials shift resources to cope with the COVID-19 pandemic and may limit access or close clinical facilities due to the COVID-19 pandemic. Additionally, if our trial participants are unable to travel to our clinical study sites as a result of quarantines or other restrictions resulting from the COVID-19 pandemic, we may experience higher drop-out rates or delays in our clinical studies. Government-imposed quarantines and restrictions may also require us to temporarily terminate our clinical sites. Furthermore, if we determine that our trial participants may suffer from exposure to COVID-19 as a result of their participation in our clinical trials, we may voluntarily terminate certain clinical sites as a safety measure until we reasonably believe that the likelihood of exposure has subsided. As a result, our expected development timelines for our product candidates may be negatively impacted. We cannot predict the ultimate impact of the COVID-19 pandemic as consequences of such an event are highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, our clinical studies or as a whole; however, the COVID-19 outbreak may materially disrupt or delay our business operations, further divert the attention and efforts of the medical community to coping with COVID-19, disrupt the marketplace in which we operate, and/or have a material adverse effect on our operations.

Moreover, the various precautionary measures taken by many governmental authorities around the world in order to limit the spread of the coronavirus has had and may continue to have an adverse effect on the global markets and global economy generally, including on the availability and pricing of employees, resources, materials, manufacturing and delivery efforts and other aspects of the global economy. There have been business closures and a substantial reduction in economic activity in countries that have had significant outbreaks of COVID-19. Significant uncertainty remains as to the potential impact of the COVID-19 pandemic on the global economy as a whole. It is currently not possible to predict how long the pandemic will last or the time that it will take for economic activity to return to prior levels. The COVID-19 pandemic could materially disrupt our business and operations, interrupt our sources of supply, hamper our ability to raise additional funds or sell securities, continue to slow down the overall economy or curtail consumer spending.

We intend to conduct foreign clinical trials (FCT) only for our pending COVID-19 vaccine. While costs of FCTs are significantly lower than the costs of an equivalent trial in the United States, there are risks associated with FCTs which may ultimately inhibit FDA approval.

Costs associated with FCTs are significantly lower than the costs of equivalent trials in the United States. However, any clinical data from the FCT may not be adequate to support FDA approval without further preclinical studies, clinical trials, or both. Other companies have in the past encountered various problems with FCTs. The occurrence of any of these could have a material adverse effect on the ultimate path to FDA approval of any COVID-19 vaccine we may develop, which may negatively impact our financial condition and our business.

Risks Related to this Offering and Our Securities

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$ per share in the net tangible book value of the common stock. See the section entitled “Dilution” below for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

Our management will have broad discretion over the use of the net proceeds from this offering.

We currently intend to use the net proceeds from this offering for working capital and other general corporate purposes. We have not determined the amounts we plan to spend for various working capital and general corporate purposes or the timing of these expenditures. Accordingly, our management will have considerable discretion in the application of the net proceeds from this offering, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds from this offering are being used appropriately. The net proceeds may be used for corporate purposes that do not increase our operating results or market value. Until the net proceeds are used, they may be placed in investments that do not produce income or that lose value.

The market price of our common stock has been, and may continue to be, volatile which could reduce the market price of our common stock.

The publicly traded shares of our common stock have experienced, and may experience in the future, significant price and volume fluctuations. This market volatility could reduce the market price of our common stock without regard to our operating performance. In addition, the trading price of our common stock could change significantly in response to actual or anticipated variations in our quarterly operating results, announcements by us or our competitors, factors affecting the medical imaging industry generally, changes in national or regional economic conditions, changes in securities analysts’ estimates for us or our competitors’ or industry’s future performance or general market conditions, making it more difficult for shares of our common stock to be sold at a favorable price or at all. The market price of our common stock could also be reduced by general market price declines or market volatility in the future or future declines or volatility in the prices of stocks for companies in our industry. The COVID-19 pandemic has resulted in significant financial market volatility and uncertainty in recent weeks. A continuation or worsening of the levels of market disruption and volatility seen in the recent past could have an adverse effect on our ability to access capital, on our business, results of operations and financial condition, and on the market price of our common stock.

A substantial number of shares of our common stock are eligible for future sale, and the sale of shares of common stock into the market, or the perception that such sales may occur, may depress our stock price.

Sales of substantial additional shares of our common stock in the public market, or the perception that these sales may occur, may significantly lower the market price of our common stock. We are unable to estimate the amount, timing or nature of future sales of shares of our common stock. We have previously issued a substantial number of shares of common stock, which are eligible for resale under Rule 144 of the Securities Act of 1933, as amended, or the Securities Act, and may become freely tradable. We have also registered shares that are issuable upon the exercise of options and warrants. If holders of options or warrants choose to exercise their securities and sell shares of common stock issued upon the exercise in the public market, or if holders of currently restricted common stock choose to sell such shares of common stock in the public market under Rule 144 or otherwise, or attempt to publicly sell such shares all at once or in a short time period, the prevailing market price for our common stock may decline.

Future issuances of shares of our common stock may cause significant dilution of equity interests of existing holders of common stock and decrease the market price of shares of our common stock.

We have previously issued options that are exercisable into a significant number of shares of our common stock and may issue additional options and warrants in the future. Should holders of options or warrants exercise their securities into shares of our common stock, it may cause significant dilution of equity interests of existing holders of our common stock and reduce the market price of shares of our common stock.

We are not currently paying dividends and will likely not pay dividends for the foreseeable future.

We have never paid or declared any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, contractual restrictions and other factors that our board of directors deems relevant.

If securities or industry analysts issue an adverse opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that securities or industry analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us adversely change their recommendation regarding our common stock, or provide more favorable relative recommendations about our competitors, the trading price of our common stock could decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the trading price of our common stock or trading volume to decline.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering contain certain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, in reliance upon the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, statements regarding the success, safety and efficacy of our drug products, product approvals, product sales, revenues, development timelines, product acquisitions, liquidity and capital resources and trends, and other statements containing forward-looking words, such as, “believes,” “may,” “could,” “would,” “will,” “expects,” “intends,” “estimates,” “anticipates,” “plans,” “seeks,” or “continues” or the negative thereof or variation thereon or similar terminology (although not all forward-looking statements contain these words). Such forward-looking statements are based on the beliefs of our management as well as assumptions made by and information currently available to our management. Readers should not put undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties and other factors, some of which are beyond our control. These risks, uncertainties and other factors may cause our actual results, performance or achievements to be materially different from the anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

Factors that might cause these differences include the following:

- the initiation, cost, timing, progress and results of, and our expected ability to undertake certain activities and accomplish certain goals with respect to, our research and development activities, preclinical studies and clinical trials, including as a result of the COVID-19 pandemic;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- our ability to obtain and deploy funding for our operations;
- our ability to continue as a going concern;
- our plans to research, develop and commercialize our product candidates, including our ability to develop adequate clinical supply of our product candidates for use in clinical trials without delays or interruptions due to the COVID-19 pandemic;
- our strategic alliance partners’ election to pursue development and commercialization of any programs or product candidates that are subject to our collaboration and license agreements with such partners;
- our ability to attract collaborators with relevant development, regulatory and commercialization expertise;
- future activities to be undertaken by our strategic alliance partners, collaborators and other third parties;
- our ability to avoid, settle or be victorious at costly litigation with shareholders, former executives or others;
- our ability to obtain and maintain intellectual property protection for our product candidates;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our ability to successfully commercialize, and our expectations regarding future therapeutic and commercial potential with respect to, our product candidates;
- the rate and degree of market acceptance of our product candidates;

- our ability to develop sales and marketing capabilities, whether alone or with potential future collaborators;
- regulatory developments in the United States and foreign countries;
- our ability to attract and retain experienced and seasoned scientific and management professionals to lead the Company;
- the performance of our third-party suppliers and manufacturers;
- the success of competing therapies that are or may become available;
- the use of proceeds from this offering;
- the accuracy of our estimates regarding future expenses, future revenues, capital requirements and need for additional financing; and
- the other risks and uncertainties described in “Risk Factors” beginning on page S-5 of this prospectus supplement and in Part I, Item 1A, Risk Factors of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, which is incorporated by reference in this prospectus supplement and the accompanying prospectus.

We urge you to consider these factors carefully in evaluating the forward-looking statements contained in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference herein. All subsequent written or oral forward-looking statements attributable to our company or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The forward-looking statements included in this prospectus supplement are made only as of the date of this prospectus supplement. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent that we are required to do so by law.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of shares of _____ our common stock in this offering will be approximately \$ _____ million, or approximately \$ _____ million if the underwriters exercise their option to purchase additional shares in full, after deducting the estimated underwriting discounts and commissions and the estimated offering expenses payable by us.

We will retain broad discretion over the use of the net proceeds from this offering. We currently expect to use the net proceeds from this offering for working capital and general corporate purposes. This anticipated use of net proceeds represents our intentions based upon our current plans and business conditions.

Pending the use of the net proceeds, we expect to invest the net proceeds in investment grade, interest-bearing securities.

DIVIDEND POLICY

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

DILUTION

Our net tangible book value as of December 31, 2019 was approximately \$25.8 million or \$1.70 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of December 31, 2019.

Dilution with respect to net tangible book value per share represents the difference between the amount per share paid by purchasers of our shares in this offering and the pro forma net tangible book value per share of our shares immediately after this offering.

After giving effect to the sale of _____ shares in this offering at the offering price of \$ _____ per share, and after deducting underwriting discounts and commissions and the estimated offering expenses payable by us for this offering, our as adjusted net tangible book value as of December 31, 2019, would have been approximately \$ _____ million, or \$ _____ per share. This represents an immediate increase in net tangible book value of \$ _____ per share to existing stockholders and immediate dilution in net tangible book value of \$ _____ per share to investors purchasing our shares in this offering at the offering price. The following table illustrates this dilution on a per share basis:

Offering price per share in this offering	\$	
Net tangible book value per share of as December 31, 2019	\$	1.70
Increase in net tangible book value per share attributable to investors in this offering	\$	
As adjusted net tangible book value per share after this offering	\$	
Dilution per share to investors in this offering	\$	

If the underwriters exercise their option in full to purchase additional shares of our common stock in this offering at the public offering price of \$ _____ per share, the as adjusted net tangible book value per share after the offering would be \$ _____ per share, the increase in the net tangible book value per share to existing stockholders would be \$ _____ per share and the dilution to purchasers in this offering would be \$ _____ per share.

The number of shares to be outstanding after the offering is based on the number of shares outstanding as of December 31, 2019. As of that date, we had 15,137,964 shares outstanding, excluding 2,249,076 shares issuable upon exercise of currently outstanding options or other rights to purchase our common stock.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe that we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to a non-U.S. holder, as defined below, of the purchase, ownership and disposition of shares of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or foreign tax laws are not discussed. This discussion is based on the Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or IRS, in effect as of the date of this offering. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a holder of our common stock. There can be no assurance the IRS or a court will not take a contrary position regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion does not address all U.S. federal income tax consequences relevant to a non U.S. holder's particular circumstances, including, without limitation:

- U.S. expatriates and certain former citizens or long-term residents of the U.S.;
- controlled foreign corporations, "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein); and
- "qualified foreign pension funds" as defined in Section 897(1)(2) of the Code and entities, all of the interests of which are held by qualified foreign pension funds.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

For purposes of this discussion, a "Non-U.S. holder" is a beneficial owner of our common stock that is neither a U.S. holder nor an entity treated as a partnership for U.S. federal income tax purposes.

For purposes of this discussion, a "U.S. holder" is any beneficial owner of our common stock that, for U.S. federal income tax purposes, is:

- an individual who is a citizen or resident of the U.S.;

- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized under the laws of the U.S., any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has made a valid election under applicable Treasury Regulations to continue to be treated as a U.S. person.

Distributions

We do not anticipate declaring or paying distributions to holders of our common stock in the foreseeable future. However, if we do make distributions on our common stock, such distributions of cash or property will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a non-U.S. holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below in the section relating to the sale or disposition of our common stock. Because we may not know the extent to which a distribution is a dividend for U.S. federal income tax purposes at the time it is made, for purposes of the withholding rules discussed below we or the applicable withholding agent may treat the entire distribution as a dividend.

Subject to the discussion below on backup withholding and FATCA, dividends paid to a non-U.S. holder of our common stock that are not effectively connected with the non-U.S. holder's conduct of a trade or business within the United States will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty).

Non-U.S. holders may be entitled to a reduction in or an exemption from withholding on dividends as a result of either (a) an applicable income tax treaty or (b) the non-U.S. holder holding our common stock in connection with the conduct of a trade or business within the United States and dividends being effectively connected with that trade or business. To claim such a reduction in or exemption from withholding, the non-U.S. holder must provide the applicable withholding agent with a properly executed (a) IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) claiming an exemption from or reduction of the withholding tax under the benefit of an income tax treaty between the U.S. and the country in which the non-U.S. holder resides or is established, or (b) IRS Form W-8ECI stating that the dividends are not subject to withholding tax because they are effectively connected with the conduct by the non-U.S. holder of a trade or business within the U.S., as may be applicable. These certifications must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. Non-U.S. holders that do not timely provide the applicable withholding agent with the required certification, but that qualify for a reduced rate under an applicable income tax treaty, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

If dividends paid to a non-U.S. holder are 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, the non-U.S. holder maintains a permanent establishment in the United States to which such dividends are attributable), then, although exempt from U.S. federal withholding tax (provided the non-U.S. holder provides appropriate certification, as described above), the non-U.S. holder will be subject to U.S. federal income tax on such dividends on a net income basis at the regular graduated U.S. federal income tax rates. In addition, a non-U.S. holder that is a corporation may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits for the taxable year that are attributable to such dividends, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Sale or Other Disposition of Common Stock

Subject to the discussions below on backup withholding and foreign accounts, a non-U.S. holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our 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, the non-U.S. holder maintains a permanent establishment in the United States to which such gain is attributable);
- 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
- our common stock constitutes U.S. real property interests, or USRPIs, by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes.

Gain described in the first bullet point above will generally be subject to U.S. federal income tax on a net income basis at the regular graduated U.S. federal income tax rates. A non-U.S. holder that is a foreign corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

A non-U.S. holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on any gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder (even though the individual is not considered a resident of the U.S.) provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we are not currently and do not anticipate becoming a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our other business assets and our non-U.S. real property interests, however, there can be no assurance we are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a non-U.S. holder of our common stock will not be subject to U.S. federal income tax if our common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market such as the Nasdaq Global Market, and such non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the non-U.S. Holder's holding period.

Non-U.S. holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Subject to the discussion below on foreign accounts, a non-U.S. holder will not be subject to backup withholding with respect to distributions on our common stock we make to the non-U.S. holder, provided the applicable withholding agent does not have actual knowledge or reason to know such holder is a U.S. person and the holder certifies its non-U.S. status, such as by providing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or other applicable certification. However, information returns generally will be filed with the IRS in connection with any distributions (including deemed distributions) made on our common stock to the non-U.S. holder, regardless of whether any tax was actually withheld. These information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Information reporting and backup withholding may apply to the proceeds of a sale or other taxable disposition of our common stock within the United States, and information reporting may (although backup withholding generally will not) apply to the proceeds of a sale or other taxable disposition of our common stock outside the United States conducted through certain U.S.-related financial intermediaries, in each case, unless the beneficial owner certifies under penalty of perjury that it is a non-U.S. holder on IRS Form W-8BEN or W-8BEN-E, or other applicable form (and the payor does not have actual knowledge or reason to know that the beneficial owner is a U.S. person) or such owner otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

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 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 (including deemed dividends) paid on our common stock, 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 U.S. owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the U.S. governing FATCA may be subject to the reporting rules of that intergovernmental agreement. Because we may not know the extent to which a distribution is a dividend for U.S. federal income tax purposes at the time it is made, for purposes of these withholding rules we or the applicable withholding agent may treat the entire distribution as a dividend. Although withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019, recently proposed Treasury Regulations would eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued. Prospective investors should consult their tax advisors regarding the potential application of these withholding provisions.

UNDERWRITING

Guggenheim Securities, LLC is acting as representative of each of the underwriters named below. Subject to the terms and conditions set forth in the underwriting agreement between us and the underwriters, each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

<u>Underwriter</u>	<u>Number of Shares</u>
Guggenheim Securities, LLC	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts; Expenses

The underwriters have advised us that they propose initially to offer the shares to the public at the public offering price set forth on the cover of this prospectus supplement and to dealers at that price less a concession not in excess of \$ _____ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discounts and commissions and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares of our common stock from us, as applicable.

	<u>Per Share</u>	<u>Total</u>	
		<u>No Exercise</u>	<u>Full Exercise</u>
Public offering price			
Underwriting discounts and commissions to be paid by us			
Proceeds, before expenses, to us			

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$400,000, which includes certain expenses incurred by the underwriters in connection with this offering that will be reimbursed by us. We have agreed to reimburse the underwriters for certain expenses incurred by them in connection with this offering (including certain fees and expenses of counsel for the underwriters in an amount not to exceed \$75,000, and fees and expenses related to filings with and review by FINRA).

Option to Purchase Additional Shares

We have granted the underwriters an option to purchase up to an additional _____ shares of common stock at the public offering price, less the underwriting discounts and commissions, within 30 days from the date of this prospectus supplement. If the underwriters exercise this option, each underwriter will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

In connection with this offering, we have agreed with the underwriters that, subject to certain customary exceptions, without the prior written consent of Guggenheim Securities, LLC on behalf of the underwriters, we will not, for a period ending 90 days after the date of this prospectus supplement, or the Lock-Up Period, (a) directly or indirectly, issue, offer, sell, agree to issue, offer or sell, solicit offers to purchase, grant any call option, warrant or other right to purchase, purchase any put option or other right to sell, pledge, hypothecate, borrow or otherwise transfer or dispose of any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock, or make any public announcement of any of the foregoing, (b) establish or increase any "put equivalent position" or liquidate or decrease any "call equivalent position" (in each case within the meaning of Section 16 of the Exchange Act and the rules and regulations thereunder) with respect to any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock, (c) otherwise enter into any swap, derivative or other transaction or arrangement that transfers to another, in whole or in part, any economic consequence of ownership of any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock, whether or not such transaction is to be settled by delivery of any shares of our common stock, securities convertible into or exercisable or exchangeable for shares of our common stock, other securities, cash or other consideration, (d) submit or file any registration statement under the Securities Act in respect of any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock, or (e) publicly announce the intention to do any of the foregoing.

In connection with this offering, certain of our stockholders and our directors and executive officers have agreed with the underwriters that, subject to certain customary exceptions, without the prior written consent of Guggenheim Securities, LLC on behalf of the underwriters, they will not, for the Lock-Up Period, (a) directly or indirectly, offer, sell, agree to offer or sell, solicit offers to purchase, grant any call option or purchase any put option with respect to, pledge, borrow or otherwise dispose of, any shares of our common stock and any security convertible into, or exercisable or exchangeable for, shares of our common stock ("Relevant Security"), (b) establish or increase any "put equivalent position" or liquidate or decrease any "call equivalent position" with respect to any Relevant Security (in each case within the meaning of Section 16 of the Exchange Act, and the rules and regulations promulgated thereunder), or otherwise enter into any swap, derivative or other transaction or arrangement that transfers to another, in whole or in part, any economic consequence of ownership of a Relevant Security, whether or not such transaction is to be settled by delivery of Relevant Securities, other securities, cash or other consideration, (c) make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any Relevant Security, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration or (d) publicly announce any intention to do any of the foregoing. The underwriters may, in their sole discretion, permit the sale of Relevant Securities during the restricted period in whole or in part and at any time, with or without notice.

Nasdaq Global Market Listing

Our common stock is listed on the Nasdaq Global Market under the symbol “ARCT.”

Price Stabilization and Short Positions

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representative may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option described above. The underwriters may close out any covered short position by either exercising their option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the closing of the offering.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representative will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Passive Market Making

Any underwriters who are qualified market makers on the Nasdaq Global Market may engage in passive market making transactions in the securities on the Nasdaq Global Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker’s bid, however, the passive market maker’s bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Some of the underwriters and certain of their affiliates may in the future engage in investment banking and other commercial dealings in the ordinary course of business with us and our affiliates, for which they may in the future receive customary fees, commissions and expenses.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers.

Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Selling Restrictions

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area, or a Member State, no shares have been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Member State at any time under the following exemptions under the Prospectus Regulation:

- A. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- B. to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or
- C. in any other circumstances falling within Article 1(4) of the Prospectus Regulation, provided that no such offer of shares shall require the Company or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and the Company that it is a “qualified investor” within the meaning of Article 2(e) of the Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Member State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an “offer to the public” in relation to shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

MiFID II Product Governance

Any person offering, selling or recommending the shares, or a distributor, should take into consideration the manufacturers’ target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the shares (by either adopting or refining the manufacturers’ target market assessment) and determining appropriate distribution channels.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are “qualified investors” (as defined in the Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as “relevant persons”) or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser’s province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser’s province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon by Dentons US LLP, New York, New York. Certain legal matters will be passed upon for the underwriters by Goodwin Procter LLP, New York, New York.

EXPERTS

The consolidated financial statements of Arcturus Therapeutics Holdings, Inc. and its subsidiaries appearing in Arcturus Therapeutics Holdings, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2019, and the effectiveness of Arcturus Therapeutics Holdings Inc. and its subsidiaries' internal control over financial reporting as of December 31, 2019 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports 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), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy and information statements and other information with the SEC. This prospectus supplement and accompanying prospectus are part of a registration statement that we have filed with the SEC relating to the securities to be offered under this prospectus supplement. This prospectus supplement does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities to be offered under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement.

The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, where you may read and copy the registration statement, as well as our reports, proxy and information statements and other information. The address of the SEC's web site is <http://www.sec.gov>.

Copies of certain information filed by us with the SEC are also available on our website at <https://arcturusrx.com>. Information contained in or accessible through our website does not constitute a part of this prospectus supplement and is not incorporated by reference in this prospectus supplement.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Information in this prospectus supplement supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement.

We incorporate by reference the information or documents listed below that we have filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on March 16, 2020;
- our Current Reports on Form 8-K filed with the SEC on March 4, 2020 and March 27, 2020; and
- the description of our common stock set forth in the registration statement on Form 8-A registering our common stock under Section 12 of the Exchange Act, which was filed with the SEC on May 17, 2013, including any amendments or reports filed for purposes of updating such description, including the Form 8-K12B filed on June 14, 2019.

All documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any report or documents that is not deemed filed under such provisions, on or after the date of this prospectus supplement until the termination of this offering shall be deemed incorporated by reference in this prospectus supplement and the accompanying prospectus and to be a part of this prospectus supplement from the date of filing of those documents.

Documents incorporated by reference are available from us, without charge. You may obtain documents incorporated by reference in this prospectus supplement and accompanying prospectus by requesting them in writing or by telephone at the following address:

Arcturus Therapeutics Holdings Inc.
10628 Science Center Drive, Suite 250
San Diego, California 92121
Telephone: (858) 900-2660
Attention: Investor Relations

You also may access these filings on our Internet site at www.arcturusrx.com. Our web site and the information contained on that site, or connected to that site, are not incorporated into this prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and accompanying prospectus is a part.

This prospectus supplement and accompanying prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into the registration statement of which this prospectus supplement and accompanying prospectus is a part. You should read the exhibits carefully for provisions that may be important to you. Neither we nor the underwriters authorized anyone to provide any information or to make any representations other than those contained in this prospectus supplement, the accompanying prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus supplement and accompanying prospectus is an offer to sell only the shares offered hereby, but only under the circumstances and in the jurisdictions where it is lawful to do so. The information contained in this prospectus supplement, the accompanying prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery.



**Common Stock
Preferred Stock
Debt Securities
Warrants
Units**

\$100,000,000

This prospectus relates to common stock, preferred stock, debt securities, warrants for debt or equity securities and units consisting of the foregoing that we may sell from time to time in one or more transactions. We will provide the specific terms and conditions of these transactions and the securities we may sell in supplements to this prospectus prepared in connection with each transaction. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on The Nasdaq Global Market, or the NASDAQ, or any securities exchange of the securities covered by the prospectus supplement. Any such prospectus supplement may also add, update or change information in this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. You should carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectuses, as well as the documents incorporated by reference or deemed to be incorporated by reference into this prospectus, carefully before you invest. This prospectus may not be used to offer or sell securities unless accompanied by a prospectus supplement.

Our common stock is traded on the NASDAQ under the symbol "ARCT."

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading "Risk Factors" on page 3 of this prospectus and contained in our filings made with the Securities and Exchange Commission and the applicable prospectus supplement.

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any underwriters are involved in the sale of these securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable commissions or discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is July 29, 2019.

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
PROSPECTUS SUMMARY	2
RISK FACTORS	3
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	3
USE OF PROCEEDS	4
DESCRIPTION OF CAPITAL STOCK WE MAY OFFER	4
DESCRIPTION OF DEBT SECURITIES WE MAY OFFER	7
DESCRIPTION OF UNITS WE MAY OFFER	16
PLAN OF DISTRIBUTION	18
LEGAL MATTERS	20
EXPERTS	20
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	20

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, as a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act, utilizing a “shelf” registration process. Under this shelf registration process, we may, from time to time, offer and sell common stock, preferred stock, debt securities, warrants for debt and equity securities and units consisting of the foregoing in one or more transactions.

This prospectus only provides you with a general description of the securities we may sell in these transactions. Each time we sell any securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement also may add, update or change information contained in this prospectus. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. This prospectus does not contain all of the information included in the registration statement we filed with the SEC. For further information about us or the securities offered hereby, you should carefully read this prospectus, any applicable prospectus supplement, any related free writing prospectuses, the information and documents incorporated herein by reference and the additional information under the heading “Where You Can Find Additional Information” before making an investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectuses that we may authorize to be provided to you. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus and the accompanying supplement to this prospectus are not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectuses, as well as information we have previously filed with the SEC and incorporated by reference, is accurate only as of the date on the cover of those documents. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus—the statement in the document having the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

This prospectus may not be used to consummate sales of any of these securities unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and/or any documents incorporated by reference, the document with the most recent date will control.

PROSPECTUS SUMMARY

Unless otherwise indicated or the context otherwise requires, the terms the “Company,” “Arcturus Therapeutics,” “we,” “us” and “our” refer to Arcturus Therapeutics Holdings Inc., a Delaware corporation, and its predecessors and consolidated subsidiaries.

Business Overview of Arcturus Therapeutics Holdings Inc.

Arcturus Therapeutics 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 delivery system, LUNAR[®], enables multiple nucleic acid 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.

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 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, megatalas and meganucleases—gene editing of errant genes.

Corporate Information

The Company was founded in 2013 under the name Alcobra Ltd. 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. (“Arcturus Ltd.”).

On June 12, 2019, Arcturus Ltd. redomiciled as a Delaware corporation following the completion of the actions contemplated by an Exchange Agreement dated as of February 8, 2019, between Arcturus Ltd. and the Company. Following the redomiciliation, the Company became the successor issuer to Arcturus Ltd. and each of Arcturus Ltd. and Arcturus Inc. became wholly-owned subsidiaries of the Company.

Our principal executive offices are located at 10628 Science Center Drive, Suite 250, San Diego, California 92121, and our telephone number is (858) 900-2660. Our website is located at <https://arcturusrx.com>. We do not incorporate by reference into this prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus. Our common stock trades on The Nasdaq Global Market under the symbol “ARCT”.

RISK FACTORS

Investment in our securities involves risks. Prior to making a decision about investing in our securities, you should consider carefully all of the information included in and incorporated by reference or deemed to be incorporated by reference in this prospectus or the applicable prospectus supplement, including the risk factors incorporated by reference herein from our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 18, 2019, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this prospectus and that are incorporated by reference herein or in the applicable prospectus supplement or any free writing prospectus. Each of these risk factors could have a material adverse effect on our business, results of operations, financial position or cash flows, which may result in the loss of all or part of your investment. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations. If any of these risks actually occur, our business and financial results could be harmed. In that case, the trading price of our common stock or other securities could decline. To the extent a particular offering implicates additional known material risks, we will include a discussion of those risks in the applicable prospectus supplement.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus contain certain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, in reliance upon the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, statements regarding the success, safety and efficacy of our drug products, product approvals, product sales, revenues, development timelines, product acquisitions, liquidity and capital resources and trends, and other statements containing forward-looking words, such as, “believes,” “may,” “could,” “would,” “will,” “expects,” “intends,” “estimates,” “anticipates,” “plans,” “seeks,” or “continues” or the negative thereof or variation thereon or similar terminology (although not all forward-looking statements contain these words). Such forward-looking statements are based on the beliefs of our management as well as assumptions made by and information currently available to our management. Readers should not put undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties and other factors, some of which are beyond our control. These risks, uncertainties and other factors may cause our actual results, performance or achievements to be materially different from the anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

Factors that might cause these differences include the following:

- the initiation, cost, timing, progress and results of, and our expected ability to undertake certain activities and accomplish certain goals with respect to, our research and development activities, preclinical studies and clinical trials;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- our ability to obtain and deploy funding for our operations;
- our ability to continue as a going concern;
- our plans to research, develop and commercialize our product candidates;
- our strategic alliance partners’ election to pursue development and commercialization of any programs or product candidates that are subject to our collaboration and license agreements with such partners;
- our ability to attract collaborators with relevant development, regulatory and commercialization expertise;
- future activities to be undertaken by our strategic alliance partners, collaborators and other third parties;
- our ability to avoid, settle or be victorious at costly litigation with shareholders, former executives or others;
- our ability to obtain and maintain intellectual property protection for our product candidates;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our ability to successfully commercialize, and our expectations regarding future therapeutic and commercial potential with respect to, our product candidates;
- the rate and degree of market acceptance of our product candidates;
- our ability to develop sales and marketing capabilities, whether alone or with potential future collaborators;
- regulatory developments in the United States and foreign countries;
- our ability to attract and retain experienced and seasoned scientific and management professionals to lead the Company;
- the performance of our third-party suppliers and manufacturers;
- the success of competing therapies that are or may become available;
- the accuracy of our estimates regarding future expenses, future revenues, capital requirements and need for additional financing

We urge you to consider these factors carefully in evaluating the forward-looking statements contained in this prospectus and any prospectus supplement. All subsequent written or oral forward-looking statements attributable to our company or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The forward-looking statements included in this prospectus are made only as of the date of this prospectus. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent that we are required to do so by law.

USE OF PROCEEDS

Unless we indicate otherwise in the applicable prospectus supplement, we anticipate that the net proceeds from the sale of the securities offered from time to time hereby will be used for general corporate purposes, including, without limitation, research and development and clinical development costs to support the advancement of our in-development drug candidates, activities in connection with the launch of our in-development drug candidates, including hiring and building inventory supply, making acquisitions of assets, businesses, companies or securities, capital expenditures and for working capital. When a particular series of securities is offered, the related prospectus supplement will set forth our intended use of the net proceeds we receive from the sale of the securities. Pending the application of the net proceeds, we may invest the proceeds in short-term, interest-bearing instruments or other investment-grade securities.

DESCRIPTION OF CAPITAL STOCK WE MAY OFFER

General

Our authorized capital stock consists of 30,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.

The following description of our common stock and preferred stock, together with the additional information included in any applicable prospectus supplements or related free writing prospectuses, summarizes the material terms and provisions of these types of securities, but it is not complete. For the complete terms of our common stock and preferred stock, please refer to our certificate of incorporation and our bylaws that are incorporated by reference into the registration statement which includes this prospectus and, with respect to preferred stock, any certificate of designation that we may file with the SEC for a series of preferred stock we may designate, if any.

We will describe in a prospectus supplement or related free writing prospectuses, the specific terms of any common stock or preferred stock we may offer pursuant to this prospectus. If indicated in a prospectus supplement, the terms of such common stock or preferred stock may differ from the terms described below.

Common Stock

As of June 21, 2019, there were 13,118,844 shares of common stock outstanding. The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. The holders of common stock are not entitled to cumulative voting rights with respect to the election of directors, and as a consequence, minority stockholders will not be able to elect directors on the basis of their votes alone.

Subject to preferences that may be applicable to any then outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by the board of directors out of funds legally available therefor. In the event of a liquidation, dissolution or winding up of us, holders of the common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any then outstanding shares of preferred stock. Holders of common stock have no preemptive rights and no right to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to our common stock. All outstanding shares of common stock are, and all shares of common stock to be issued under this prospectus will be, fully paid and non-assessable. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any of our outstanding preferred stock.

Listing

Our common stock is listed under the symbol "ARCT" on the NASDAQ.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust.

Dividends

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

Preferred Stock

We are authorized to issue a total of 10,000,000 shares of preferred stock. As of June 21, 2019, there were no shares of preferred stock issued and outstanding.

Preferred stock may be issued from time to time, in one or more series, as authorized by the board of directors, without stockholder approval. The prospectus supplement relating to the preferred shares offered thereby will include specific terms of any preferred shares offered, including, if applicable:

- the title of the shares of preferred stock;
- the number of shares of preferred stock offered, the liquidation preference per share and the offering price of the shares of preferred stock;
- the dividend rate(s), period(s) and/or payment date(s) or method(s) of calculation thereof applicable to the shares of preferred stock;
- whether the shares of preferred stock are cumulative or not and, if cumulative, the date from which dividends on the shares of preferred stock shall accumulate;
- the procedures for any auction and remarketing, if any, for the shares of preferred stock;
- the provision for a sinking fund, if any, for the shares of preferred stock;
- the provision for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights of the shares of preferred stock;
- any listing of the shares of preferred stock on any securities exchange;
- the terms and conditions, if applicable, upon which the shares of preferred stock will be convertible into common shares, including the conversion price (or manner of calculation thereof);
- discussion of federal income tax considerations applicable to the shares of preferred stock;
- the relative ranking and preferences of the shares of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs;
- any limitations on issuance of any series or class of shares of preferred stock ranking senior to or on a parity with such series or class of shares of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs;
- any other specific terms, preferences, rights, limitations or restrictions of the shares of preferred stock; and
- any voting rights of such preferred stock.

The transfer agent and registrar for any series or class of preferred stock will be set forth in the applicable prospectus supplement.

Possible Anti-Takeover Effects of Delaware Law and our Charter Documents

Provisions of the Delaware General Corporation Law, or DGCL, our certificate of incorporation, and our bylaws, could make it more difficult to acquire us by means of a tender offer, a proxy contest or otherwise, or to remove incumbent officers and directors. These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and takeover bids that our board of directors may consider inadequate and to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the DGCL, an anti-takeover statute. 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 following the time the person became an interested stockholder, unless the business combination or the acquisition of shares that resulted in a stockholder becoming an interested stockholder is approved in a prescribed manner. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. 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. The existence of this provision would be expected to have an anti-takeover effect with respect to transactions not approved in advance by our board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by our stockholders.

Election and Removal of Directors

Our board of directors is elected annually by all holders of our capital stock. The stockholders may nominate one or more persons for election as directors at an annual meeting of stockholders, but only if written notice of such stockholder’s intent to make such nomination or nominations has been received by the Secretary of the Company not less than forty-five (45) nor more than seventy-five (75) days prior to the first anniversary of the preceding year’s annual meeting of stockholders. Any vacancy on the board of directors resulting from death, resignation, removal or otherwise or newly created directorships may be filled by the vote of the majority of directors then in office, although less than a quorum, or by a sole remaining director.

Amendment

The affirmative vote of a majority of the entire board of directors may amend and repeal the bylaws. The bylaws may be altered, amended or repealed, and new bylaws may be adopted, at any annual meeting of the stockholders (or at any special meeting thereof duly called for that purpose) by a majority of the combined voting power of the then outstanding shares of capital stock of all classes and series of the Company entitled to vote generally in the election of directors, voting as a single class, provided that, in the notice of any such special meeting, notice of such purpose shall be given.

Size of Board and Vacancies

Pursuant to our certificate of incorporation, and our bylaws, the number of directors constituting the board shall be at least one and no more than nine and our board of directors has the exclusive right to fix the size of the board and to fill any vacancies resulting from death, resignation, disqualification or removal as well as any newly created directorships arising from an increase in the size of the board.

Special Stockholder Meetings

Our bylaws provide that special meetings of stockholders can be called only by the board of directors, the chairman of the board of directors or the chief executive officer. Stockholders are not permitted to call a special meeting and cannot require the board of directors to call a special meeting. There is no right of stockholders to act by written consent without a meeting.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our bylaws establish advance notice procedures with respect to stockholder proposals and nomination of candidates for election as directors other than nominations made by or at the direction of our board of directors or a committee of our board of directors.

No Cumulative Voting

The DGCL provides that stockholders are denied the right to cumulate votes in the election of directors unless our certificate of incorporation provides otherwise. Our amended and certificate of incorporation does not provide for cumulative voting.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without stockholder approval. We may use additional shares for a variety of purposes, including future public offerings to raise additional capital, to fund acquisitions and as employee compensation. The existence of authorized but unissued shares of undesignated preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer, stockholder or stockholder group. The rights of holders of our common stock described above will be subject to, and may be adversely affected by, the rights of any preferred stock that we may designate and issue in the future. The issuance of shares of undesignated preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Director Liability

Our bylaws limit the extent to which our directors are personally liable to us and our stockholders, to the fullest extent permitted by the DGCL. The inclusion of this provision in our bylaws may reduce the likelihood of derivative litigation against directors and may discourage or deter stockholders or management from bringing a lawsuit against directors for breach of their duty of care.

DESCRIPTION OF DEBT SECURITIES WE MAY OFFER

The following description, together with the additional information we include in any applicable prospectus supplements or free writing prospectuses, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement or free writing prospectus. The terms of any debt securities we offer under a prospectus supplement may differ from the terms we describe below. Unless the context requires otherwise, whenever we refer to the “indentures,” we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue any senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue any subordinated debt securities under the subordinated indenture and any supplemental indentures that we will enter into with the trustee named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The indentures will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We use the term “trustee” to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture and any supplemental indentures applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

The terms of each series of debt securities will be established by or pursuant to a resolution of our board of directors and set forth or determined in the manner provided in an officers’ certificate or by a supplemental indenture. Debt securities may be issued in separate series without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series. We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, and, if so, the terms and who the depositary will be;
- the maturity date;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a U.S. person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- provisions for a sinking fund purchase or other analogous fund, if any, including the date, if any, on which, and the price at which we are obligated, pursuant thereto or otherwise, to redeem, or at the holder’s option, to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- provisions relating to modification of the terms of the security or the rights of the security holder;
- whether the indenture will restrict our ability or the ability of our subsidiaries to:
 - incur additional indebtedness;
 - issue additional securities;
 - create liens;
 - pay dividends or make distributions in respect of our capital stock or the capital stock of our subsidiaries;
 - redeem capital stock;
 - place restrictions on our subsidiaries’ ability to pay dividends, make distributions or transfer assets;
 - make investments or other restricted payments;
 - sell, transfer or otherwise dispose of assets;
 - enter into sale-leaseback transactions;
 - engage in transactions with stockholders or affiliates;
 - issue or sell stock of our subsidiaries; or
 - effect a consolidation or merger;

- whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;
- information describing any book-entry features;
- the applicability of the provisions in the indenture on discharge;
- whether the debt securities are to be offered at a price such that they will be deemed to be offered at an “original issue discount” as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations.

U.S. federal income tax consequences applicable to debt securities sold at an original issue discount will be described in the applicable prospectus supplement. In addition, U.S. federal income tax or other consequences applicable to any debt securities which are denominated in a currency or currency unit other than U.S. dollars may be described in the applicable prospectus supplement.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement the terms under which a series of debt securities may be convertible into or exchangeable for our common stock, our preferred stock or other securities (including securities of a third party). We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock, our preferred stock or other securities (including securities of a third party) that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquiror of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended;
- if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable and the time for payment has not been extended;
- if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the trustee or we and the trustee receive notice from the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

We will describe in each applicable prospectus supplement any additional events of default relating to the relevant series of debt securities. If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default arises due to the occurrence of certain specified bankruptcy, insolvency or reorganization events, the unpaid principal, premium, if any, and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any such waiver shall cure the default or event of default.

Subject to the terms of the applicable indenture, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity or security satisfactory to it against any loss, liability or expense. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holders is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

The indentures provide that if an event of default has occurred and is continuing, the trustee will be required in the exercise of its powers to use the degree of care that a prudent person would use in the conduct of its own affairs. The trustee, however, may refuse to follow any direction that conflicts with law or the indenture, or that the trustee determines is unduly prejudicial to the rights of any other holder of the relevant series of debt securities, or that would involve the trustee in personal liability. Prior to taking any action under the indentures, the trustee will be entitled to indemnification against all costs, expenses and liabilities that would be incurred by taking or not taking such action.

A holder of the debt securities of any series will have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made a written request and such holders have offered reasonable indemnity to the trustee or security satisfactory to it against any loss, liability or expense to be incurred in compliance with instituting the proceeding as trustee; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

The indentures provide that if a default occurs and is continuing and is actually known to a responsible officer of the trustee, the trustee must mail to each holder notice of the default within 45 days after it occurs, unless such default has been cured. Except in the case of a default in the payment of principal or premium of, or interest on, any debt security or certain other defaults specified in an indenture, the trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee or a trust committee of directors, or responsible officers of the trustee, in good faith determine that withholding notice is in the best interests of holders of the relevant series of debt securities.

Modification of Indenture; Waiver

Subject to the terms of the indenture for any series of debt securities that we may issue, we and the trustee may change an indenture without the consent of any holders with respect to the following specific matters:

- to fix any ambiguity, defect or inconsistency in the indenture;
- to comply with the provisions described above under “-Consolidation, Merger or Sale”;
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act;
- to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of debt securities, as set forth in such indenture;
- to provide for the issuance of, and establish the form and terms and conditions of, the debt securities of any series as provided under “-General,” to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment hereunder by a successor trustee;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities and to make all appropriate changes for such purpose;
- to add such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred to us in the indenture; or
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series in any material respect; provided that any amendment made solely to conform the provisions of the indenture to the corresponding description of the debt securities contained in the applicable prospectus or prospectus supplement shall be deemed not to adversely affect the interests of the holders of such debt securities; provided further, that in connection with any such amendment we will provide the trustee with an officers’ certificate certifying that such amendment will not adversely affect the rights or interests of the holders of such debt securities.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may only make the following changes with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities;
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver;
- changing any of our obligations to pay additional amounts;
- reducing the amount of principal of an original issue discount security or any other note payable upon acceleration of the maturity thereof;
- changing the currency in which any note or any premium or interest is payable;
- impairing the right to enforce any payment on or with respect to any note;
- adversely changing the right to convert or exchange, including decreasing the conversion rate or increasing the conversion price of, such note, if applicable;
- in the case of the subordinated indenture, modifying the subordination provisions in a manner adverse to the holders of the subordinated debt securities;
- if the debt securities are secured, changing the terms and conditions pursuant to which the debt securities are secured in a manner adverse to the holders of the secured debt securities;
- reducing the requirements contained in the applicable indenture for quorum or voting;
- changing any of our obligations to maintain an office or agency in the places and for the purposes required by the indentures; or
- modifying any of the above provisions set forth in this paragraph.

Discharge

Each indenture provides that, subject to the terms of the indenture and any limitation otherwise provided in the prospectus supplement applicable to a particular series of debt securities, we may elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, and any premium and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture and is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur. However, upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest payment.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Ranking Debt Securities

The subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

The senior debt securities will be unsecured and will rank equally in right of payment to all our other senior unsecured debt. The senior indenture does not limit the amount of senior debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF WARRANTS WE MAY OFFER

As of June 21, 2019, we had no warrants to purchase shares of our common stock outstanding. We typically issue warrants to purchase shares of our common stock to investors as part of a financing transaction, or in connection with services rendered by placement agents and outside consultants.

We may issue warrants to purchase debt securities, preferred stock, common stock or any combination of the foregoing. We may issue warrants independently or together with any other securities we offer under a prospectus supplement. The warrants may be attached to or separate from the securities. We will issue each series of warrants under a separate warrant agreement to be entered into between a warrant agent and us. The warrant agent will act solely as our agent in connection with the warrants and will not have any obligations or relationship of agency or trust for or with holders or beneficial owners of warrants. The following outlines some of the general terms and provisions of the warrants that we may issue from time to time. When we issue warrants, we will provide the specific terms of the warrants and the applicable warrant agreement in a prospectus supplement and any related free writing prospectuses and such terms may differ from those described below. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement. The following description, and any description of the warrants included in a prospectus supplement, may not be complete and is subject to and qualified in its entirety by reference to the terms and provisions of the applicable warrant agreement. Equity Warrants

We will describe in the applicable prospectus supplement and any related free writing prospectuses the terms of the preferred stock warrants or common stock warrants being offered, the warrant agreement relating to the preferred stock warrants or common stock warrants and the warrant certificates representing the preferred stock warrants or common stock warrants, including, as applicable:

- the title of the warrants;
- the securities for which the warrants are exercisable;
- the price or prices at which the warrants will be issued;
- if applicable, the number of warrants issued with each share of preferred stock or share of common stock;
- if applicable, the date on and after which the warrants and the related preferred stock or common stock will be separately transferable;
- the date on which the right to exercise the warrants will commence, and the date on which the right will expire;

- the maximum or minimum number of warrants which may be exercised at any time;
- information with respect to book-entry procedures, if any;
- a discussion of the material U.S. federal income tax considerations applicable to exercise of the warrants; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Unless otherwise provided in the applicable warrant agreement and corresponding prospectus supplement or any related free writing prospectuses, holders of equity warrants will not be entitled, by virtue of being such holders, to vote, consent, receive dividends, receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter, or to exercise any rights whatsoever as stockholders.

Except as provided in the applicable warrant agreement and corresponding prospectus supplement or any related free writing prospectuses, the exercise price payable and the number of shares of common stock or preferred stock purchasable upon the exercise of each warrant will be subject to adjustment in certain events, including the issuance of a stock dividend to holders of common stock or preferred stock or a stock split, reverse stock split, combination, subdivision or reclassification of common stock or preferred stock. In lieu of adjusting the number of shares of common stock or preferred stock purchasable upon exercise of each warrant, we may elect to adjust the number of warrants. Unless otherwise provided in the applicable warrant agreement and corresponding prospectus supplement or any related free writing prospectuses, no adjustments in the number of shares purchasable upon exercise of the warrants will be required until all cumulative adjustments require an adjustment of at least 1% thereof. No fractional shares will be issued upon exercise of warrants, but we will pay the cash value of any fractional shares otherwise issuable. Notwithstanding the foregoing, except as otherwise provided in the applicable warrant agreement and corresponding prospectus supplement or any related free writing prospectuses, in case of any consolidation, merger, or sale or conveyance of our property as an entirety or substantially as an entirety, the holder of each outstanding warrant will have the right to the kind and amount of shares of stock and other securities and property, including cash, receivable by a holder of the number of shares of common stock or preferred stock into which each warrant was exercisable immediately prior to the particular triggering event.

Debt Warrants

We will describe in the applicable prospectus supplement and any related free writing prospectuses the terms of the debt warrants being offered, the warrant agreement relating to the debt warrants and the debt warrant certificates representing the debt warrants, including, as applicable:

- the title of the debt warrants;
- the aggregate number of the debt warrants;
- the price or prices at which the debt warrants will be issued;
- the designation, aggregate principal amount and terms of the debt securities purchasable upon exercise of the debt warrants, and the procedures and conditions relating to the exercise of the debt warrants;
- the designation and terms of any related debt securities with which the debt warrants are issued, and the number of the debt warrants issued with each security;
- the date, if any, on and after which the debt warrants and the related debt securities will be separately transferable;
- the principal amount of debt securities purchasable upon exercise of each debt warrant, and the price at which the principal amount of the debt securities may be purchased upon exercise;
- the date on which the right to exercise the debt warrants will commence, and the date on which the right will expire;
- the maximum or minimum number of the debt warrants that may be exercised at any time;
- information with respect to book-entry procedures, if any;
- changes to or adjustments in the exercise price of the debt warrants;
- a discussion of the material U.S. federal income tax considerations applicable to the exercise of the debt warrants; and
- any other terms of the debt warrants and terms, procedures and limitations relating to the exercise of the debt warrants.

As may be permitted under the warrant agreement, holders may exchange debt warrant certificates for new debt warrant certificates of different denominations, and may exercise debt warrants at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement and any related free writing prospectuses. Prior to the exercise of their debt warrants, holders of debt warrants will not have any of the rights of holders of the securities purchasable upon the exercise and will not be entitled to payments of principal, premium or interest on the securities purchasable upon the exercise of debt warrants.

Exercise of Warrants

Each warrant will entitle the holder of the warrant to purchase for cash at the exercise price provided in the applicable warrant agreement and corresponding prospectus supplement or any related free writing prospectuses the principal amount of debt securities or shares of preferred stock or shares of common stock being offered. Holders may exercise warrants at any time up to the close of business on the expiration date provided in the applicable warrant agreement and corresponding prospectus supplement or any related free writing prospectuses. After the close of business on the expiration date, unexercised warrants are void.

Holders may exercise warrants as described in the applicable warrant agreement and corresponding prospectus supplement or any free writing prospectuses relating to the warrants being offered. Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable warrant agreement and corresponding prospectus supplement or any related free writing prospectuses, we will, as soon as practicable, forward the debt securities, shares of preferred stock or shares of common stock purchasable upon the exercise of the warrant. If less than all of the warrants represented by the warrant certificate are exercised, we will issue a new warrant certificate for the remaining warrants.

DESCRIPTION OF UNITS WE MAY OFFER

The following description, together with the additional information we may include in any applicable prospectus supplements and free writing prospectuses, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of one or more shares of common stock, shares of preferred stock, debt securities and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock We May Offer,” “Description of Debt Securities We May Offer” and “Description of Warrants We May Offer” will apply to each unit and to any common stock, preferred stock, debt security or warrant included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

We, the unit agents and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so registered, despite any notice to the contrary.

PLAN OF DISTRIBUTION

We may sell the offered securities from time to time.

- through agents;
- to or through underwriters;
- to or through broker-dealers (acting as agent or principal);
- in “at the market offerings” within the meaning of Rule 415(a)(4) of the Securities Act;
- directly to purchasers, through a specific bidding or auction process or otherwise; or
- through a combination of these methods of sale.

The applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including:

- the name or names of any underwriters, if any, and if required, any dealers or agents and the amount of shares underwritten or purchased by each of them;
- the purchase price or other consideration to be paid in connection with the sale of the securities being offered and the proceeds we will receive from the sale;
- any underwriting discounts or agency fees and other items constituting underwriters’ or agents’ compensation;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

We may distribute the securities from time to time in one or more transactions at:

- fixed price or prices, which may be changed from time to time;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices; or
- negotiated prices.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If we utilize an underwriter in the sale of the securities being offered, we will execute an underwriting agreement with the underwriter at the time of sale. Any underwriters used in the sale will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate.

In connection with the sale of the securities, we, or the purchasers of the securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. We may change from time to time the public offering price and any discounts or concessions allowed or reallowed or paid to dealers.

We may directly solicit offers to purchase the securities. We may also designate agents to solicit offers to purchase the securities from time to time. We will name in a prospectus supplement any agent involved in the offer or sale of our securities. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

If we utilize a dealer in the sale of the securities being offered by this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

In addition, we may enter into derivative transactions with third parties (including the writing of options), or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such a transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

All securities we offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities. Shares of our common stock sold pursuant to the registration statement of which this prospectus is a part will be authorized for listing and trading on the NASDAQ. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ or any securities market or other securities exchange of the securities covered by the prospectus supplement.

Underwriters may engage in stabilizing and syndicate covering transactions in accordance with Rule 104 under the Exchange Act. Rule 104 permits stabilizing bids to purchase the securities being offered as long as the stabilizing bids do not exceed a specified maximum. Underwriters may over-allot the offered securities in connection with the offering, thus creating a short position in their account. Syndicate covering transactions involve purchases of the offered securities by underwriters in the open market after the distribution has been completed in order to cover syndicate short positions. Underwriters may also cover an over-allotment or short position by exercising their over-allotment option, if any. Stabilizing and syndicate covering transactions may cause the price of the offered securities to be higher than it would otherwise be in the absence of these transactions. These transactions, if commenced, may be discontinued at any time.

Any underwriters who are qualified market makers on the NASDAQ may engage in passive market making transactions in the securities on the NASDAQ in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business. We will describe such relationships in the prospectus supplement naming the underwriter and the nature of any such relationship.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed on by Dentons US LLP. Any underwriters, dealers or agents will also be advised about the validity of the securities and other legal matters by their own counsel, which will be named in the prospectus supplement.

EXPERTS

The consolidated financial statements of Arcturus Therapeutics Ltd. at December 31, 2018, and for the year ended December 31, 2018, appearing in Arcturus Therapeutics Ltd.'s Annual Report (Form 10-K) for the year ended December 31, 2018 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), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference 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 thereon and incorporated by reference herein. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy and information statements and other information with the SEC. This prospectus is part of a registration statement that we have filed with the SEC relating to the securities to be offered under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities to be offered under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement.

The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, where you may read and copy the registration statement, as well as our reports, proxy and information statements and other information. The address of the SEC's web site is <http://www.sec.gov>.

Copies of certain information filed by us with the SEC are also available on our website at <https://arcturusrx.com>. Information contained in or accessible through our website does not constitute a part of this prospectus and is not incorporated by reference in this prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus. This means that we can disclose important information about us and our financial condition to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus. This prospectus incorporates by reference the documents listed below that we have previously filed with the SEC:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the SEC on March 18, 2019 and as amended on April 10, 2019;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, as filed with the SEC on May 13, 2019;
- Our Current Reports on Form 8-K, as filed with the SEC on March 19, 2019, May 13, 2019, May 20, 2019, June 14, 2019, June 19, 2019 and June 20, 2019 (in each case, except for information contained therein which is furnished rather than filed); and
- the description of our common stock set forth in the registration statement on Form 8-A registering our common stock under Section 12 of the Exchange Act, which was filed with the SEC on May 17, 2013, including any amendments or reports filed for purposes of updating such description, including the Form 8-K12B filed on June 14, 2019.

We also incorporate by reference into this prospectus all documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of any offering of securities made by this prospectus. Nothing in this prospectus shall be deemed to incorporate information furnished but not filed with the SEC (including without limitation, information furnished under Item 2.02 or Item 7.01 of Form 8-K, and any exhibits relating to such information).

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in the applicable prospectus supplement or in any other subsequently filed document which also is or is deemed to be incorporated by reference modifies or supersedes the statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of the filings incorporated herein by reference, including exhibits to such documents that are specifically incorporated by reference, at no cost, by writing or calling us at the following address or telephone number:

Arcturus Therapeutics Holdings Inc.
10628 Science Center Drive, Suite 250
San Diego, California 92121
Telephone: (858) 900-2660
Attention: Investor Relations

Statements contained in this prospectus as to the contents of any contract or other documents are not necessarily complete, and in each instance investors are referred to the copy of the contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference and the exhibits and schedules thereto.

Shares



Common Stock

PROSPECTUS SUPPLEMENT

Sole Book-Running Manager

Guggenheim Securities

, 2020