

The information in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been filed with the Securities and Exchange Commission and is effective. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated July 28, 2020

PRELIMINARY PROSPECTUS SUPPLEMENT  
(To prospectus dated May 21, 2020)



Shares

Common Stock

We are offering an aggregate of \_\_\_\_\_ shares of our common stock pursuant to this prospectus supplement and accompanying prospectus.

Our common stock is listed on the Nasdaq Global Market under the symbol "ARCT." The last reported sale price of our common stock on the Nasdaq Global Market on July 27, 2020 was \$63.19 per share.

**An investment in our common stock involves a high degree of risk. Please read "[Risk Factors](#)" on page S-8 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement before investing in our securities.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public offering price	\$ _____	\$ _____
Underwriting discounts and commissions <sup>(1)</sup>	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____

(1) We refer you to "Underwriting" beginning on page S-22 of this prospectus supplement for information regarding underwriting compensation.

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

The underwriters expect to deliver the shares against payment on or about \_\_\_\_\_, 2020.

*Joint Book-Running Managers*

Citigroup Guggenheim Securities Barclays

The date of this prospectus supplement is \_\_\_\_\_, 2020.

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### Prospectus

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## ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, including the documents incorporated by reference herein, which describes the specific terms of this offering and also adds to and updates the information contained in the accompanying prospectus and the documents incorporated by reference therein. The second part, the accompanying prospectus, including the documents incorporated by reference therein, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. Before you invest, you should carefully read this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein, as well as the additional information described in this prospectus supplement under “Where You Can Find Additional Information.” This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein. However, if any statement in one of these documents is inconsistent with a statement in another document with a later date that is incorporated by reference herein, the statement in the document having the later date modifies and supersedes the earlier statement. Before buying any of the shares of common stock that we are offering, we urge you to carefully read this prospectus supplement, the accompanying prospectus and any related free writing prospectus and all of the information incorporated by reference herein and therein, as well as the additional information described under the headings “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.” These documents contain important information that you should consider when making your investment decision.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus, and any related free writing prospectus filed by us with the Securities and Exchange Commission, or SEC. Neither we nor the underwriters have authorized any other person to provide you with any information that is different. If anyone provides you with different or inconsistent information, you should not rely on it.

This prospectus supplement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the shares of common stock described in this prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus supplement outside the United States.

You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

In this prospectus supplement, the terms “Arcturus Therapeutics,” “we,” “us,” “our” and the “Company” refer to Arcturus Therapeutics Holdings Inc. and its predecessors and consolidated subsidiaries unless otherwise stated or the context otherwise requires.

The Arcturus logo and other trademarks of Arcturus are some of our trademarks and registered marks used in this prospectus supplement and the documents incorporated by reference herein. This prospectus supplement and the documents incorporated by reference herein also include trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, our trademarks and tradenames appear without the ® and ™ symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and tradenames.

## PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained in other parts of this prospectus supplement or incorporated by reference from our Annual Report on Form 10-K for the year ended December 31, 2019 and our other filings with the SEC listed under the section of the prospectus titled “Incorporation of Certain Information by Reference” contained in this prospectus supplement. This summary does not contain all of the information you should consider in making your investment decision. Before deciding to invest in our common stock, you should read this prospectus supplement, the accompanying prospectus, any related free writing prospectus and the information incorporated by reference herein and therein in their entirety. You should carefully consider, among other things, the matters discussed under the section titled “Risk Factors” contained in this prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference in this prospectus supplement and the accompanying prospectus. Some of the statements in this prospectus supplement constitute forward-looking statements that involve risks and uncertainties. See the section titled “Special Note Regarding Forward-Looking Statements.”

### Company Overview

We are a clinical-stage messenger RNA medicines company focused on the development of infectious disease vaccines and significant opportunities within liver and respiratory rare diseases utilizing our Self-Transcribing and Replicating RNA (“STARR”) technology. In addition to our internal messenger RNA (“mRNA”) platform, our proprietary lipid mediated delivery system, LUNAR, has the potential to enable multiple nucleic acid medicines.

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

- We have deep expertise in the discovery and development of RNA medicines, including key experience in the production of RNA drug substance and nanoparticle-formulated drug product.
- We have a pipeline of eleven drug candidates in late-stage discovery and early-stage development, five of which are wholly-owned and six of which involve partnered programs.
- We have developed and continue to develop LUNAR, a novel lipid-mediated delivery technology platform, which draws from a growing library of over 200 lipids that were designed at Arcturus and many of which are claimed in issued patents. Other lipids in this growing library are undergoing extensive research to test for desirable properties, and we continue to seek patent protection for newly designed lipids. Our lipid library is intended to enable safer and more efficient delivery than lipids commonly used in the industry.
- We have developed the STARR technology platform which combines self-replicating RNA with LUNAR into a single solution for partners.
- Our wholly-owned, LUNAR and nucleic acid technologies are covered by a patent portfolio of 192 patents and patent applications, issued in the United States, China, Europe, Japan and other countries. This patent portfolio covers our proprietary mRNA and STARR chemistry, design, modifications and manufacturing process as well as our LUNAR chemistry, design and drug product manufacturing.

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 antigen expression for vaccines; (2) siRNA, microRNA, and antisense oligonucleotides - knockdown of genes overexpressed in disease; and (3) CRISPR, TALEN, zinc finger proteins, megaTALs and meganucleases - gene editing of errant genes.

## Recent Developments

### *LUNAR-COV19 Vaccine Candidate*

Coronaviruses are a family of viruses that can lead to respiratory illness, including Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Coronaviruses are transmitted between animals and people and can evolve into strains not previously identified in humans. On January 7, 2020, a novel coronavirus was identified as the cause of pneumonia cases in Wuhan City, Hubei Province of China. On February 11, 2020 the World Health Organization announced the official name for the disease that caused the 2019 novel coronavirus outbreak as coronavirus disease 2019, commonly abbreviated as COVID-19. The spread of COVID-19 has resulted in the current global coronavirus pandemic.

In response to this pandemic, in March of 2020 we partnered with Duke-NUS Medical School to develop a COVID-19 vaccine for the Singapore Economic Development Board, or EDB, based on the Company's STARR™ Technology and designated the vaccine candidate LUNAR-COV19. Duke-NUS Medical School is a graduate entry medical school in Singapore, established in 2005 through a partnership between Duke University School of Medicine and the National University of Singapore (NUS).

On March 4, 2020, we were awarded a grant from the EDB to support the co-development of LUNAR-COV19 with Duke-NUS Medical School. In exchange for the grant, we agreed to supply LUNAR-COV19 to the EDB for use within Singapore and we retained the right to sell and market LUNAR-COV19 outside of Singapore. We have agreed to pay Duke-NUS Medical School a low single digit royalty based on annual net sales of the vaccine in markets or jurisdictions outside of Singapore.

On April 27, 2020, we released positive immunogenicity data from our preclinical study in rodents for LUNAR-COV19, as measured by investigators at the Duke-NUS Medical School. Seroconversion, using a gold standard virus neutralization assay (Vero-E6 cells with a SARS-CoV-2 Singapore Clinical Isolate), and IgG/IgM antibody titers were assessed at day 10 and day 19. Rodents were immunized with a single dose (0.2, 2, and 10 µg, i.m.) of LUNAR-COV19 vaccine. The study results showed self-transcribing and replicating (STARR™) mRNA induced higher seroconversion relative to conventional mRNA at equivalent doses. In conjunction, anti-SARS-CoV-2 IgG and IgM antibody titers were also higher.

On May 4, 2020, we entered into an agreement with Catalent, Inc. to manufacture LUNAR-COV19 at Catalent's cGMP drug substance biomanufacturing facility in Madison, Wisconsin, for human clinical studies.

On May 08, 2020, we disclosed new supportive preclinical data, providing evidence for an adaptive cellular (CD8+ cells) and balanced (Th1/Th2) immune response data from LUNAR-COV19, providing strong support for human vaccine clinical trials. The preclinical data was measured by investigators at the Duke-NUS Medical School.

On June 30, 2020, we submitted a Clinical Trial Application (CTA) for LUNAR-COV19 to the Singapore Health Sciences Authority (HSA). On July 20, 2020, the HSA notified us that LUNAR-COV19 was approved to proceed into clinical trials. We intend to commence a Phase 1/2 clinical trial in Singapore in August 2020 to test several dose levels of LUNAR-COV19 in up to 108 adults, including older adults, to evaluate safety, tolerability and the extent and duration of the humoral and cellular immune response. Based on the results of this trial we intend to commence Phase 3 clinical trials in global locations.

On July 23, 2020, we entered into a binding term sheet with the Ministry of Health of Israel pursuant to which we have agreed to provide Israel with a specified minimum and maximum number of LUNAR-COV19 doses, in all cases pursuant to the terms of a definitive supply agreement to be entered into within thirty (30) days of July 23, 2020.

We intend to utilize a portion of the proceeds of this offering to fund further clinical development and manufacturing of LUNAR-COV19.

We also expect to secure additional funding to continue development and scaling up of LUNAR-COV19 from future securities offerings and from additional contracts with foreign governmental authorities in addition to those of Singapore and Israel.

#### *ARCT-810 mRNA-based therapeutic candidate for OTC deficiency*

In April 2020, we became a clinical stage company when we announced that our Investigational New Drug application for a Phase 1b study in patients with ornithine transcarbamylase (“OTC”) deficiency was deemed allowed to proceed by the U.S. Food and Drug Administration (“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.

The Phase 1b study and Phase 1 study are focused on an mRNA-based therapeutic candidate for OTC deficiency named ARCT-810. ARCT-810 utilizes our LUNAR® lipid-mediated delivery platform to deliver OTC messenger RNA to liver cells. The ARCT-810 program is supported by preclinical data in OTC deficiency murine models demonstrating that dosing of LUNAR-OTC results in robust OTC protein expression and activity resulting in improvements in ureagenesis and plasma ammonia, and increased survival. Worldwide development and commercialization rights to ARCT-810 are entirely held by Arcturus.

On June 5, 2020, we announced that we dosed the first healthy volunteer in a Phase 1 study of ARCT-810 in a double blind, placebo-controlled, dose-escalation trial in healthy adult volunteers. The study is expected to evaluate five cohorts, each with six subjects. In each cohort, four subjects are expected to receive ARCT-810 and two are expected to receive a placebo. The study is intended to evaluate safety and tolerability, pharmacokinetics, and pharmacodynamic biomarkers.

#### *LUNAR-FLU Vaccine*

Flu season is an annually recurring time period characterized by the prevalence of outbreaks of influenza (flu). The season occurs during the cold half of the year in each hemisphere. Influenza activity can usually be predicted and even tracked geographically.

Arcturus is initiating a pipeline program to develop a vaccine against seasonal flu. The program builds on the STARR/LUNAR platform and the learnings from our COVID-19 vaccine program. The vaccine will be quadrivalent and target hemagglutinin antigens from two strains of Influenza/A and two strains of Influenza/B. The intended product will mediate serological conversion of antibody-mediated immunity following a single intramuscular injection.

#### *LUNAR-CV Targeted mRNA Therapeutic*

We are developing a mRNA replacement therapy targeting Low-Density Lipoprotein (LDL) Receptor (LDLR) for the treatment of homozygous familial hypercholesterolemia (HoFH), a severe genetic disease characterized by premature and aggressive plaque buildup, life threatening coronary artery disease and aortic valve disease predominantly due to abnormalities in the function or expression of LDLR. Present therapies do not sufficiently lower the plasma LDL-cholesterol (LDL-C) that lead to cardiovascular disease. Our preliminary studies in an LDLR knock out mouse model have demonstrated restoration of normal LDL plasma levels following a single intravenous administration of a LUNAR-mRNA encoding the LDLR.

#### *Ultragenyx Option Exercise*

On June 18, 2019, we entered into an Equity Purchase Agreement with Ultragenyx Pharmaceutical Inc. (“Ultragenyx”). Pursuant to this agreement, we granted Ultragenyx a two-year option to purchase up to 600,000 additional shares of our common stock at a price of \$16.00 per share. On May 20, 2020, Ultragenyx completed the exercise of this option to purchase an additional 600,000 shares of Common Stock in accordance with the terms of the agreement. The issuance of the additional 600,000 shares closed on May 20, 2020.

## *Financial Update*

We expect our cash and cash equivalents as of June 30, 2020 to be approximately \$136.1 million. This estimate of cash and cash equivalents is based on currently available information. It does not present all necessary information for an understanding of our financial condition as of June 30, 2020. As we complete our quarter-end financial close process and finalize our second quarter 2020 unaudited financial statements, we will be required to make significant judgments in a number of areas that may result in the estimate provided herein being different than the final financial information. This estimate has been prepared by and is the responsibility of our management. Our independent registered public accounting firm has not audited, reviewed or performed any procedures with respect to this estimate or the accounting treatment thereof and does not express an opinion or any other form of assurance with respect thereto. We expect to complete our unaudited financial statements for the quarter ended June 30, 2020 subsequent to the completion of this offering. It is possible that we or our independent registered public accounting firm may identify items that require us to make adjustments to the estimated cash balance set forth above and those changes could be material. Accordingly, undue reliance should not be placed on this estimate. The estimate is not necessarily indicative of any future period and should be read together with the sections titled “Risk Factors” and “Special Note Regarding Forward-Looking Statements” in this prospectus supplement, and our financial statements, related notes and other financial information incorporated by reference herein.

## Corporate Information

Our company was founded in 2013 as Arcturus Therapeutics, Inc., and we have maintained our principal executive offices in San Diego, California since that time. In November 2017, Alcobra Ltd., an Israeli limited company, merged with our company, changed its name to Arcturus Therapeutics Ltd. (“Arcturus Israel”), and commenced trading on Nasdaq under the symbol “ARCT.” On June 17, 2019, we redomiciled to the United States (the “Redomiciliation”) and changed our name to Arcturus Therapeutics Holdings Inc., as described more fully below.

### Redomiciliation

In May 2019, shareholders of Arcturus Israel approved the Redomiciliation. In connection therewith, in February 2019, Arcturus Israel entered into a share exchange agreement (the “Exchange Agreement”) with Arcturus Therapeutics Holdings Inc., a newly established Delaware corporation. In June 2019, pursuant to the terms of the Exchange Agreement, all issued ordinary shares and options to purchase ordinary shares of Arcturus Israel were exchanged on a one-for-one basis for newly issued shares of common stock and options to purchase common stock, respectively, of the Company, resulting in Arcturus Israel becoming a subsidiary of the Company.

In June 2019, Arcturus Israel’s ordinary shares were delisted from trading on Nasdaq and the Company’s shares commenced trading on Nasdaq under the symbol “ARCT.” Arcturus Israel is now a wholly-owned subsidiary of the Company, which is the successor to Arcturus Israel. Proceedings to liquidate Arcturus Israel are now pending in Israeli court.



## THE OFFERING

<b>Common stock offered by us</b>	shares of our common stock
<b>Option to purchase additional shares</b>	We have granted the underwriters an option to purchase up to an additional _____ shares of our common stock for a period of 30 days from the date of this prospectus supplement.
<b>Use of proceeds</b>	We intend to use the net proceeds from this offering to develop, test and manufacture our LUNAR-COV19 vaccine candidate and to continue clinical development of LUNAR-OTC; to advance our LUNAR-CF, LUNAR-CV and LUNAR-FLU preclinical programs into clinical development; to fund early research and development of novel and proprietary RNA medicines; and for general corporate and working capital purposes. See “Use of Proceeds” on page S-16 for additional information.
<b>Risk factors</b>	You should read the “Risk Factors” section of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement for a discussion of factors that you should read and consider before investing in our common stock.
<b>Nasdaq Global Market symbol</b>	ARCT

The number of shares of our common stock to be outstanding immediately following this offering as shown above is based on 20,610,056 shares of our common stock outstanding on June 30, 2020 and excludes:

- 2,223,398 shares of our common stock reserved for issuance under stock option agreements issued pursuant to our 2019 Omnibus Equity Incentive Plan at a weighted average exercise price of \$11.91 per share;
- 3,366,340 shares of our common stock reserved for future issuance under our Amended and Restated 2019 Omnibus Equity Incentive Plan; and
- 600,000 shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan.

Except as otherwise noted, all information in this prospectus supplement assumes no exercise by the underwriters of their option to purchase additional shares of common stock.

## RISK FACTORS

You should carefully consider the following risk factors and the risk factors discussed under “Item 1A—Risk Factors” contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and in Part II, Item 1A, Risk Factors of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 and of any subsequently filed Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, which are incorporated by reference in this prospectus supplement in their entirety, together with all of the other information contained in this prospectus supplement and the accompanying prospectus or incorporated by reference in this prospectus supplement and the accompanying prospectus. The risks described in any document incorporated by reference are not the only ones we have, but are considered to be the most material. Additional risks of which we are not presently aware or that we currently believe are immaterial may also harm our business and results of operations. If any of these risks actually occur, our business, financial condition and results of operations would likely suffer. In that case, the market price of the common stock could decline, and you may lose part or all of your investment in our company.

### **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 prevents infection from the virus in a timely manner, if at all, and preliminary data may not be indicative of future success.***

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 prevents infection from the virus in a timely manner, if at all. We intend to commence a phase 1/2 clinical trial in Singapore in August 2020, and in connection therewith, we will inject our LUNAR-COV19 vaccine candidate into human subjects for the first time. If any adverse events occur in the trial subjects, our development program could be delayed or halted altogether. 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, a substantial number of companies, individuals and institutions are working to develop a vaccine, many of which have substantially greater financial, scientific and other resources than us, and 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, and lead to demand being driven away from our product, even if developed. Finally, even though we may report preliminary pre-clinical or other data that could appear to be positive, no assurance can be given that any product candidate will be safe in humans or prove to be effective once trials commence. We will not be able to commercialize or market the product candidate unless and until we are able to demonstrate that our vaccine candidate is safe and effective in humans.

***It is possible that one or more government entities may take actions that directly or indirectly have a negative effect on our 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 are currently conducting foreign clinical trials (FCT) 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.

***Currently we are only conducting FCTs for our pending COVID-19 vaccine and we have not yet submitted an investigational new drug application (IND) with the US FDA. We cannot market our pending COVID-19 vaccine in the United States unless and until we seek and obtain approval from the US FDA.***

Currently, we are only conducting FCTs for LUNAR-COV19. We intend to prepare and submit to the FDA an IND for LUNAR-COV19. As such, we will be required to conduct further preclinical studies, clinical trials, or both in order to obtain approval to sell LUNAR-COV19 in the United States. If the FDA approves our IND for LUNAR-COV19, which cannot be assured, we would require significant additional financial resources to conduct clinical trials, which may not be available to us on attractive terms, if at all. Furthermore, no assurance can be given that such trials will demonstrate that LUNAR-COV19 is safe or effective. The inability to sell LUNAR-COV19 in the United States could have a material adverse effect our financial condition and results of operations.

***We are devoting significant resources to the scale-up and development of our LUNAR-COV19 vaccine candidate.***

We are working toward the large scale technical development, manufacturing scale-up in several countries and larger scale deployment of this potential vaccine. The number of doses of this potential vaccine that we are able to produce is dependent on our ability, and the ability of our contract manufacturers, to successfully and rapidly scale-up manufacturing capacity. The number of doses that we will be able to produce is also dependent in large part on the dosage of the vaccine required to be administered to patients which will be determined in our clinical trials. To support the scale-up, we will need to expend significant resources and capital. Although this offering will provide a source of capital to support our LUNAR-COV19 program, we will also need to seek and secure significant additional funding through a variety of potential contractual arrangements and collaborations with third parties. We may be unable to enter such arrangements on favorable terms, or at all, which would adversely affect our ability to develop, manufacture and distribute a potential vaccine.

In addition, since the path to licensure of any vaccine against COVID-19 is unclear, we may have a widely used vaccine in circulation in certain countries prior to our receipt of marketing approval. Unexpected safety issues could lead to significant reputational damage for us and our technology platform going forward and other issues, including delays in our other programs, the need for re-design of our clinical trials and the need for significant additional financial resources. Given the rapidity of both the onset of the COVID-19 pandemic and our development efforts with respect to LUNAR-COV19, as well as the complexity of the economics of a pandemic vaccine, we are only in the early stages of considering how to price a potential vaccine and cannot provide assurance as to the ultimate impact of our LUNAR-COV19 program on our company.

***The regulatory pathway for LUNAR-COV19 is continually evolving, and may result in unexpected or unforeseen challenges.***

To date, LUNAR-COV19 has moved rapidly through the regulatory review and approval process. The speed at which all parties are acting to create and test many therapeutics and vaccines for COVID-19 is unusual, and evolving or changing plans or priorities within the requisite regulatory bodies, including changes based on new knowledge of COVID-19 and how the disease affects the human body, may significantly affect the regulatory timeline for LUNAR-COV19. Results from clinical testing may raise new questions and require us to redesign proposed clinical trials, including revising proposed endpoints or adding new clinical trial sites or cohorts of subjects.

***Our internal computer systems and physical premises, or those of our strategic collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs and our manufacturing operations.***

Our internal computer systems and those of our current and any future strategic collaborators, vendors, and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, cybersecurity threats, war, and telecommunication and electrical failures. We may experience cyber-attacks on our information technology systems by threat actors of all types (including but not limited to nation states, organized crime, other criminal enterprises, individual actors and/or advanced persistent threat groups). In addition, we may experience intrusions on our physical premises by any of these threat actors. If any such cyber-attack or physical intrusion were to cause interruptions in our operations, such as a material disruption of our development programs or our manufacturing operations, whether due to a loss of our trade secrets or other proprietary information it would have a material and adverse effect on us. For example, the loss of clinical trial data from one or more ongoing or completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, if we were to run multiple clinical trials in parallel, any breach of our computer systems or physical premises could result in a loss of data or compromised data integrity across more than one of our programs in different stages of development. Any such breach, loss, or compromise of clinical trial participant personal data may also subject us to civil fines and penalties or claims for damages, either under the General Data Protection Regulation (“GDPR”) and relevant member state law in the EU, other foreign laws, and the federal Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), and other relevant state and federal privacy laws in the United States including the California Consumer Privacy Act (“CCPA”). On May 13, 2020, the Federal Bureau of Investigation (“FBI”) and Cybersecurity and Infrastructure Security Agency (“CISA”) announced that the FBI is investigating the targeting and compromise of U.S. organizations conducting COVID-19-related research by People’s Republic of China (“PRC”)-affiliated cyber actors. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, including but not limited to information related to our LUNAR-COV19 vaccine candidate, we could incur liability, our competitive and reputational position could be harmed, and the further development and commercialization of our investigational medicines could be delayed.

***The positive data from the preclinical trials of LUNAR-COV19, our COVID-19 vaccine candidate, may not be predictive of the results of our planned clinical trials, which is one of a number of factors that may delay or prevent us from receiving regulatory approval of our COVID-19 vaccine candidate.***

We have yet to conduct our first in-human clinical trials. Results from the proposed Phase 1/2 study or any interim results of any further Phase 2 or Phase 3 studies for LUNAR-COV19 if approved could show diminished efficacy as compared to our preclinical study results. We also may observe adverse events in subjects participating in these clinical studies. In addition, the interpretation of the data from our clinical trials of LUNAR-COV19 by regulatory agencies may differ from our interpretation of such data and such regulatory agencies may require that we conduct additional studies or analyses. Further, the assays being used to measure and analyze the effectiveness of vaccines being developed to treat COVID-19 have only recently been developed and are continuing to evolve. The validity and standardization of these assays has not yet been established, and the results obtained in clinical studies of LUNAR-COV19 with subsequent versions of these assays may be less positive than the pre-clinical results we have obtained to date. Any of these factors and others that we may not be able to identify at this time, could delay or prevent us from receiving regulatory approval of LUNAR-COV19 and there can be no assurance that LUNAR-COV19 will be approved in a timely manner, if at all.

***We are relying on advance purchase commitments of our LUNAR-COV19 vaccine candidate from certain foreign governmental agencies, including Singapore and the State of Israel.***

While this offering will provide a source of capital to support the development and manufacture of our LUNAR-COV19 vaccine, we must also secure additional funding through contractual arrangements with third parties, including the governments of Singapore and the State of Israel. We may be unable to enter into such arrangements on favorable terms, or at all, which would adversely affect our ability to develop, manufacture and distribute a potential vaccine.

Our existing commitment from the State of Israel to purchase up to \$275 million of the LUNAR-COV19 vaccine candidate is subject to the negotiation of a definitive supply agreement. We may not be able to agree on the terms and conditions of a definitive supply agreement, in which case, we may not receive any funds from the State of Israel.

#### **Risks Related to this Offering of Our Common Stock**

***You will suffer immediate dilution in the net tangible book value per share of the common stock that you purchase in this offering.***

The public offering price of our common stock is substantially higher than the as-adjusted net tangible book value per share of our common stock. Therefore, investors purchasing shares of our common stock in this offering will pay a price per share that substantially exceeds the as-adjusted net tangible book value per share after this offering. For more information, see "Dilution."

***We will require additional capital funding, the receipt of which may impair the value of our common stock.***

Our future capital requirements depend on many factors, including our research, development, sales and marketing activities. We will need to raise additional capital through public or private equity or debt offerings or through arrangements with strategic partners or other sources in order to continue to develop our drug candidates. There can be no assurance that additional capital will be available when needed or on terms satisfactory to us, if at all. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution and the new equity securities may have greater rights, preferences or privileges than our existing common stock.

***Our management will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.***

Our management will have broad discretion in the application of the net proceeds from this offering and our stockholders will not have the opportunity as part of their investment decisions to assess whether the net proceeds are being used appropriately. You may not agree with our decisions, and our use of the proceeds may not yield any return on your investment. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our failure to apply the net proceeds of this offering effectively could compromise our ability to pursue our growth strategy and we might not be able to yield a significant return, if any, in our investment of these net proceeds. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

***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.

## CAUTIONARY 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;
- 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;
- the use of proceeds from this offering; and
- the other risks and uncertainties described in “Risk Factors” beginning on page S-8 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 and in Part II, Item 1A, Risk Factors of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 and any subsequently filed Quarterly Reports on Form 10-Q, which are 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 this offering will be approximately \$      million (or \$      million if the underwriters exercise their option to purchase additional shares in full), after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering to support clinical studies to develop, test and manufacture our LUNAR-COV19 vaccine candidate and the continued clinical development of LUNAR-OTC, the advancing of our LUNAR-CF, LUNAR-CV and LUNAR-FLU preclinical programs into clinical development and for general corporate and working capital purposes, including ongoing research and development activities for novel and proprietary RNA drug candidates and our LUNAR and STARR technology platforms. The amounts and timing of our actual use of the net proceeds from this offering will vary depending on numerous factors, including the factors described under “Risk Factors” located elsewhere in this prospectus supplement, the accompanying prospectus or in the information incorporated by reference herein or therein. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds from this offering.

Pending application of the net proceeds as discussed above, we plan to invest any remaining proceeds from this offering in a variety of capital preservation instruments, including short-term, interest-bearing obligations, investment-grade instruments, or direct or guaranteed obligations of the U.S. government.

## 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

If you purchase shares of common stock in this offering, you will experience dilution to the extent of the difference between the public offering price per share in this offering and our as adjusted net tangible book value per share after this offering.

Net tangible book value per share represents total tangible assets less total liabilities, divided by the number of shares of common stock outstanding. Our historical net tangible book value as of March 31, 2020 was \$17.0 million, or \$1.12 per share of common stock. After giving effect to our sale of shares of common stock at a public offering price of \$ per share, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2020 would have been approximately \$ million, or approximately \$ per share. This represents an immediate increase in net tangible book value of approximately \$ per share to existing stockholders and an immediate dilution in as adjusted net tangible book value of approximately \$ per share to new investors in this offering.

Public offering price per share		\$
Net tangible book value per share as of March 31, 2020	\$	1.12
Increase in net tangible book value per share attributable to this offering	\$	
As adjusted net tangible book value per share, after giving effect to this offering		\$
Dilution per share to new investors in this offering		\$

If the underwriters fully exercise their option to purchase additional shares of common stock, our as adjusted net tangible book value after this offering would increase to \$ per share, and there would be an immediate dilution of \$ per share to new investors in this offering.

The above discussion and tables are based on 15,156,989 shares of common stock outstanding as of March 31, 2020 and excludes the following:

- 2,203,176 shares of our common stock reserved for issuance under stock option agreements issued pursuant to our 2019 Omnibus Equity Incentive Plan at a weighted average exercise price of \$9.29 per share;
- 354,332 shares of our common stock reserved for future issuance under our Amended and Restated 2019 Omnibus Equity Incentive Plan;
- 600,000 shares of our common stock issued on May 20, 2020 pursuant to an option granted to Ultragenyx Pharmaceutical Inc. at an exercise price of \$16.00 per share;
- 600,000 shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan; and
- 4,735,297 shares of our common stock issued in a public offering of common stock consummated on April 20, 2020.

## MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

### FOR NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a general discussion of material U.S. federal income tax considerations and certain U.S. estate tax considerations relating to the ownership and disposition of our common stock applicable to non-U.S. holders. For purposes of this discussion, a “non-U.S. holder” means a beneficial owner of our common stock (other than an entity or arrangement that is treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is includable in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust if (i) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more “U.S. persons,” as defined under the U.S. Internal Revenue Code of 1986, as amended (which we refer to as the Code), have the authority to control all substantial decisions of the trust or (ii) such trust has made a valid election to be treated as a U.S. person for U.S. federal income tax purposes.

This discussion is based on current provisions of the Code, final, temporary and proposed Treasury regulations promulgated thereunder (which we refer to as the Treasury Regulations), judicial decisions, published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or IRS, all in effect as of the date of this prospectus and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change could alter the tax consequences to non-U.S. holders described herein. There can be no assurance that the IRS, will not challenge one or more of the tax consequences described herein.

This discussion is limited to non-U.S. holders that hold our common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder’s individual circumstances nor does it address any aspects of U.S. state, local or non-U.S. taxes, the alternative minimum tax, or the unearned income Medicare contribution tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- banks, insurance companies and other financial institutions;
- brokers or dealers or traders in securities;
- tax-exempt organizations;
- pension plans;
- persons who hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment or who have elected to mark securities to market;
- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;

- persons for whom our common stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to our common stock being taken into account in an applicable financial statement;
- non-U.S. governments; and
- U.S. expatriates and former citizens or long-term residents of the United States.

If a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner therein will generally depend on the status of the partner and the activities of the partnership. Partners of a partnership holding our common stock should consult their tax advisors as to the particular U.S. federal income tax consequences applicable to them.

THIS SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE DESCRIPTION OF ALL TAX CONSEQUENCES FOR NON-U.S. HOLDERS RELATING TO THE OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK. PROSPECTIVE HOLDERS OF OUR COMMON STOCK SHOULD CONSULT WITH THEIR TAX ADVISORS REGARDING THE TAX CONSEQUENCES TO THEM (INCLUDING THE APPLICATION AND EFFECT OF ANY STATE, LOCAL, NON-U.S. INCOME AND OTHER TAX LAWS) OF THE OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK.

### **Distributions**

As discussed under “Dividend Policy” above, we do not expect to make distributions on our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions 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 of distributions not treated as dividends for U.S. federal income tax purposes will first constitute a tax-free return of capital of the non-U.S. holder’s investment and be applied against and reduce a non-U.S. holder’s adjusted tax basis in its common stock, but not below zero. Any remaining excess will be treated as capital gain and will be treated as described below under “Gain on Sale or Other Disposition of Common Stock.” Any such distributions will also be subject to the discussions below under the headings “FATCA” and “Backup Withholding, Information Reporting and Other Reporting Requirements.”

Subject to the discussion in the next paragraph regarding effectively connected income, dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence.

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

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

## Gain on Sale or Other Disposition of Common Stock

Subject to the discussion below under the headings “FATCA” and “Backup Withholding, Information Reporting and Other Reporting Requirements,” a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of the non-U.S. holder’s shares of common stock unless:

- the gain is effectively connected with a trade or business carried on by the non-U.S. holder within the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment or fixed base maintained by such non-U.S. holder);
- the non-U.S. holder is an individual and is present in the United States for 183 days or more in the taxable year of disposition and certain other conditions are met; or
- we are or have been a “U.S. real property holding corporation” for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding such disposition or such non-U.S. holder’s holding period of our common stock, and, provided that our common stock is regularly traded in an established securities market within the meaning of applicable Treasury Regulations, the non-U.S. holder has held, directly or constructively, at any time during said period, more than 5% of our common stock.

Gain that is effectively connected with the conduct of a trade or business in the United States generally will be subject to U.S. federal income tax on a net income tax basis, at regular U.S. federal income tax rates. If the non-U.S. holder is a non-U.S. corporation, the branch profits tax described above also may apply to such effectively connected gain. An individual non-U.S. holder who is subject to U.S. federal income tax because the non-U.S. holder was present in the United States for 183 days or more during the year of sale or other disposition of our common stock will be subject to a flat 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the gain derived from such sale or other disposition, which may be offset by certain U.S. source capital losses, if any. We believe that we are not and we do not anticipate becoming a U.S. real property holding corporation for U.S. federal income tax purposes.

## FATCA

The Foreign Account Tax Compliance Act, or FATCA, imposes a U.S. federal withholding tax of 30% on certain payments to foreign financial institutions, investment funds and certain other non-U.S. persons that fail to comply with certain information reporting and certification requirements pertaining to their direct and indirect U.S. securityholders and/or U.S. accountholders and are not otherwise exempt. Under applicable Treasury Regulations and IRS guidance, this withholding currently applies to payments of dividends, if any, on our common stock and will apply to payments of gross proceeds from a sale or other disposition of our common stock made on or after January 1, 2019. An intergovernmental agreement between the U.S. and an applicable foreign country may modify the requirements described in this paragraph. Prospective investors are encouraged to consult with their tax advisors regarding the possible implications of this legislation on their investment in our common stock.

## Backup Withholding, Information Reporting and Other Reporting Requirements

We must report annually to the IRS and to each non-U.S. holder the amount of any distributions paid to, and the tax withheld with respect to, each non-U.S. holder. These reporting requirements apply regardless of whether withholding was reduced or eliminated by an applicable income tax treaty. Copies of this information reporting may also be made available under the provisions of a specific income tax treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established.

A non-U.S. holder will generally be subject to backup withholding for dividends on our common stock paid to such holder unless such holder certifies under penalties of perjury that, among other things, it is a non-U.S. holder (provided that the payor does not have actual knowledge or reason to know that such holder is a U.S. person) or otherwise establishes an exemption.

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

Backup withholding is not an additional income tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder generally can be credited against the non-U.S. holder's U.S. federal income tax liability, if any, or refunded, provided that the required information is furnished to the IRS in a timely manner. Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them.

#### **U.S. Federal Estate Tax**

Shares of our common stock that are owned or treated as owned by an individual who is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death are considered U.S. situs assets and will be included in the individual's gross estate for U.S. federal estate tax purposes. Such shares, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

**The preceding discussion of material U.S. federal income tax considerations and certain U.S. estate tax considerations is for information only. It is not legal or tax advice. Prospective investors should consult their tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of owning and disposing of our common stock, including the consequences of any proposed changes in applicable laws.**

## UNDERWRITING

Citigroup Global Markets Inc., Guggenheim Securities, LLC and Barclays Capital Inc. are acting as joint book-running managers and representatives of each of the underwriters named below. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus supplement, each underwriter named below has severally agreed to purchase, and we have agreed to sell to that underwriter, the number of shares of common stock set forth opposite the underwriter's name in the following table.

Underwriters	Number of Shares
Citigroup Global Markets Inc.	
Guggenheim Securities, LLC	
Barclays Capital Inc.	
Total	

The underwriting agreement provides that the obligations of the underwriters to purchase the shares included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the shares (other than those covered by the underwriters' option to purchase additional shares described below) if they purchase any of the shares.

Shares sold by the underwriters to the public will be offered at the public offering price set forth on the cover of this prospectus supplement. Any shares sold by the underwriters to securities dealers may be sold at a discount from the public offering price not to exceed \$ per share. If all the shares are not sold at the offering price, the underwriters may change the offering price and the other selling terms.

If the underwriters sell more shares than the total number set forth in the table above, we have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to additional shares at the public offering price less the underwriting discount. To the extent the option is exercised, each underwriter must purchase a number of additional shares approximately proportionate to that underwriter's initial purchase commitment. Any shares issued or sold under the option will be issued and sold on the same terms and conditions as the other shares that are the subject of this offering.

We and our officers and directors have agreed that, subject to specified limited exceptions, for a period of 90 days from the date of this prospectus supplement, we and they will not, without the prior written consent of Citigroup Global Markets Inc. and Guggenheim Securities LLC, dispose of or hedge any shares or any securities convertible into or exchangeable for shares of our common stock. Citigroup Global Markets Inc. and Guggenheim Securities LLC, in their sole discretion, may release any of the securities subject to these lock-up agreements at any time without notice.

The shares are listed on The Nasdaq Global Market under the symbol "ARCT."

The following table shows the underwriting discounts and commissions that we are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Paid by Arcturus Therapeutics Holdings, Inc.	
	No Exercise	Full Exercise
Per share	\$	\$
Total	\$	\$

We estimate that our portion of the total expenses of this offering will be \$ . 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).



In connection with the offering, the underwriters may purchase and sell shares in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the underwriters' option to purchase additional shares, and stabilizing purchases.

- Short sales involve secondary market sales by the underwriters of a greater number of shares than they are required to purchase in the offering.
  - “Covered” short sales are sales of shares in an amount up to the number of shares represented by the underwriters' option to purchase additional shares.
  - “Naked” short sales are sales of shares in an amount in excess of the number of shares represented by the underwriters' option to purchase additional shares.
- Covering transactions involve purchases of shares either pursuant to the underwriters' option to purchase additional shares or in the open market in order to cover short positions.
  - To close a naked short position, the underwriters must purchase 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 the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
  - To close a covered short position, the underwriters must purchase shares in the open market or must exercise the underwriters' option to purchase additional shares. In determining the source of shares to close 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 underwriters' option to purchase additional shares.
- Stabilizing transactions involve bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the shares. They may also cause the price of the shares to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on The Nasdaq Global Market, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

## **Relationships**

The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have in the past performed commercial banking, investment banking and advisory services for us from time to time for which they have received customary fees and reimbursement of expenses and may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses. In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investments and securities activities may involve securities and instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and 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 short positions in such securities and instruments.

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 because of any of those liabilities.

#### **Notice to Prospective Investors in the European Economic Area**

In relation to each member state of the European Economic Area, no offer of shares which are the subject of the offering has been, or will be made to the public in that Member State, other than under the following exemptions under the Prospectus Directive:

- a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives for any such offer; or
- c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares referred to in (a) to (c) above shall result in a requirement for the company or any representative to publish a prospectus supplement pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of shares is made or who receives any communication in respect of an offer of shares, or who initially acquires any shares will be deemed to have represented, warranted, acknowledged and agreed to and with each representative and the company that (1) it is a “qualified investor” within the meaning of the law in that Member State implementing Article 2(1)(e) of the Prospectus Directive; and (2) in the case of any shares acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or where shares have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those shares to it is not treated under the Prospectus Directive as having been made to such persons.

The company, the representatives and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments and agreements.

This prospectus supplement has been prepared on the basis that any offer of shares in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus supplement for offers of shares. Accordingly, any person making or intending to make an offer in that Member State of shares which are the subject of the offering contemplated in this prospectus supplement may only do so in circumstances in which no obligation arises for the company or any of the representatives to publish a prospectus supplement pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither the company nor the representatives have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for the company or the representatives to publish a prospectus supplement for such offer. For the purposes of this provision, the expression an “offer of shares to the public” in relation to any 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 the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression “Prospectus Directive” means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in each Member State.

The above selling restriction is in addition to any other selling restrictions set out below.

## 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 supplement 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 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) 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.

## Notice to Prospective Investors in the United Kingdom

This prospectus supplement is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order and other persons to whom it may lawfully be communicated (each such person being referred to as a "relevant person").

This prospectus supplement and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

## Notice to Prospective Investors in France

Neither this prospectus supplement nor any other offering material relating to the shares described in this prospectus supplement has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers*. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus supplement nor any other offering material relating to the shares has been or will be:

- released, issued, distributed or caused to be released, issued or distributed to the public in France; or
- used in connection with any offer for subscription or sale of the shares to the public in France.

Such offers, sales and distributions will be made in France only:

- to qualified investors (*investisseurs qualifiés*) or to a restricted circle of investors (*cercle restreint d'investisseurs*), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French *Code monétaire et financier*;
- to investment services providers authorized to engage in portfolio management on behalf of third parties; or
- in a transaction that, in accordance with article L.411-2-II-1°-or-2°-or 3° of the French *Code monétaire et financier* and article 211-2 of the General Regulations (*Règlement Général*) of the *Autorité des Marchés Financiers*, does not constitute a public offer (*appel public à l'épargne*).

The shares may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

#### **Notice to Prospective Investors in Hong Kong**

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to professional investors, as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (“SFO”) and any rules made under that Ordinance; or in other circumstances which do not result in the document being a prospectus supplement, as defined in the Companies Ordinance (Cap. 32) of Hong Kong (“CO”) or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors, as defined in the SFO and any rules made under that Ordinance.

This prospectus supplement has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus supplement may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus supplement and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

#### **Notice to Prospective Investors in Japan**

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the underwriters will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

#### **Notice to Prospective Investors in Singapore**

This prospectus supplement has not been and will not be lodged or registered as a prospectus supplement with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:
  - to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
  - where no consideration is or will be given for the transfer;
  - where the transfer is by operation of law;
  - as specified in Section 276(7) of the SFA; or
  - as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Solely for the purposes of its obligations pursuant to Section 309B of the SFA, we have determined, and hereby notify all relevant persons (as defined in the CMP Regulations 2018), that the shares are “prescribed capital markets products” (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

#### **Notice to Prospective Investors in Australia**

This prospectus supplement is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus supplement in Australia:

You confirm and warrant that you are either:

- a “sophisticated investor” under section 708(8)(a) or (b) of the Corporations Act;
- a “sophisticated investor” under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the Company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
- a person associated with the Company under Section 708(12) of the Corporations Act; or
- a “professional investor” within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus supplement is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus supplement for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

## LEGAL MATTERS

Dentons US LLP, New York, New York, will pass upon the validity of the shares of common stock offered by this prospectus supplement. The underwriters are being represented in connection with this offering 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 ADDITIONAL INFORMATION

We file annual reports, quarterly reports, current reports, proxy statements and other information with the SEC. Our SEC filings are and will become available to the public over the Internet at the SEC's website at [www.sec.gov](http://www.sec.gov). You can also find our public filings on our website at [www.arcturusrx.com](http://www.arcturusrx.com). Our website and the information contained therein or connected thereto are not part of this prospectus supplement or the accompanying prospectus.

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of common stock being offered by this prospectus supplement. This prospectus supplement and the accompanying prospectus are a part of that registration statement but do not contain all of the information set forth in the registration statement or the exhibits to the registration statement. For further information with respect to us and the shares we are offering pursuant to this prospectus supplement, you should refer to the registration statement and its exhibits. Statements contained in this prospectus supplement as to the contents of any contract, agreement or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other documents filed as an exhibit to the registration statement. You may read or obtain a copy of the registration statement at the SEC's website referred to above.

## INCORPORATION OF CERTAIN INFORMATION 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;
- The information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2019 from our definitive proxy statement on Schedule 14A (other than information furnished rather than filed), which was filed with the SEC on March 16, 2020;
- our Quarterly Report on Form 10-Q for the period ended March 31, 2020 filed with the SEC on May 8, 2020;
- our Current Reports on Form 8-K filed with the SEC on March 4, 2020, March 27, 2020, April 17, 2020, April 21, 2020, May 21, 2020, June 9, 2020 and July 24, 2020; and
- the description of our common stock set forth in the Form 8-K12B filed on June 18, 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](http://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.

We have authorized no one to provide you with any information that differs from that contained in this prospectus supplement, the accompanying prospectus or incorporated by reference herein or therein. Accordingly, you should not rely on any information that is not contained in this prospectus supplement or the accompanying prospectus or incorporated by reference herein or therein. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date of the front cover of this prospectus supplement.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus supplement will be deemed modified, superseded or replaced for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement modifies, supersedes or replaces such statement



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

**\$200,000,000**

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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."

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**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.**

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**The date of this prospectus is May 21, 2020.**

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or the SEC, using 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.**

We are a messenger RNA medicines company focused on significant opportunities within liver and respiratory rare diseases, and the development of infectious disease vaccines utilizing our Self-Transcribing and Replicating RNA (“STARR”) technology. In addition to our internal messenger RNA (“mRNA”) platform, our proprietary lipid nanoparticle delivery system, LUNAR, has the potential to enable multiple nucleic acid medicines.

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 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 drug candidates in late-stage discovery and early-stage development, two of which are wholly-owned and five of which involve partnered programs.
- We have developed and continue to develop LUNAR, a novel lipid-mediated delivery technology platform, which draws from a growing library of over 200 lipids that were designed at Arcturus and many of which are claimed in issued patents. Other lipids in this growing library are undergoing extensive research to test for desirable properties, and we continue to seek patent protection for newly designed lipids. Our lipid library is intended to enable safer and more efficient delivery than lipids commonly used in the industry.
- We have developed the STARR technology platform which combines self-replicating RNA with LUNAR into a single solution for partners.
- Our wholly-owned, LUNAR and nucleic acid technologies are covered by a patent portfolio of 182 patents and patent applications, issued in the United States, China, Europe, Japan and other countries.

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

### **Corporate Information**

Our company was founded in 2013 as Arcturus Therapeutics, Inc., and we have maintained our principal executive offices in San Diego, California since that time. In November 2017, Alcobra Ltd., an Israeli limited company, merged with our company, changed its name to Arcturus Therapeutics Ltd. and commenced trading on Nasdaq under the symbol “ARCT.” On June 17, 2019, we redomiciled to the United States and changed our name to Arcturus Therapeutics Holdings Inc.

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, 2019, filed with the 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 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 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; and
- 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 May 8, 2020, there were 19,892,287 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 May 8, 2020, 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 depository 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 acquirer 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 May 8, 2020, 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 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 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, 2019, as filed with the SEC on March 16, 2020;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, as filed with the SEC on May 8, 2020;
- Our Current Reports on Form 8-K, as filed with the SEC on January 10, 2020, March 4, 2020, March 11, 2020, March 27, 2020, April 17, 2020, April 21, 2020, and May 7, 2020, (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 Form 8-K12B filed on June 18, 2019.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the “Exchange Act” in this prospectus, prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

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.



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

**\$200,000,000**

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**PROSPECTUS**

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**May 21, 2020**

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You must not rely on any unauthorized information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not offer to sell any securities in any jurisdiction where it is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall create any implication that the information in this prospectus is correct after the date hereof.



**Shares**

**Common Stock**

**PROSPECTUS SUPPLEMENT**

*Joint Book-Running Managers*

**Citigroup**

**Guggenheim Securities**

**Barclays**

**, 2020**

