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

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 10, 2020

ARCTURUS THERAPEUTICS HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-38942 (Commission File Number) 32-0595345 (I.R.S. Employer Identification No.)

10628 Science Center Drive, Suite 250 San Diego, California 92121 (Address of principal executive offices)

Registrant's telephone number, including area code: (858) 900-2660

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

	Trading	Name of each exchange
Title of each class	Symbol(s)	on which registered
Common stock, par value \$0.001 per share	ARCT	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 2.02. Results of Operations and Financial Conditions.

On August 10, 2020, Arcturus Therapeutics Holdings Inc. (the "Company" or "Arcturus") issued a press release, a copy of which is furnished herewith as Exhibit 99.1, announcing the Company's financial results for the quarter ended June 30, 2020 and providing a corporate update (the "Press Release").

The information contained in Item 2.02 of this Current Report on Form 8-K, including the Press Release, shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended. In addition, this information shall not be deemed incorporated by reference into any of the Company's filings with the Securities and Exchange Commission, except as shall be expressly set forth by specific reference in any such filing.

Cautionary Note Regarding Forward-Looking Statements

Certain statements in this communication and the Press Release are forward-looking statements" that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995.

The Press Release contains forward-looking statements that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. Any statements, other than statements of historical fact included in the Press Release, including those regarding strategy, future operations, collaborations, the likelihood of success, efficacy or safety of ARCT-021 or ARCT-810, the ability to initiate or complete preclinical and clinical development programs, including as a result of the COVID-19 pandemic, are forward-looking statements. Arcturus may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in any forward-looking statements such as the foregoing and you should not place undue reliance on such forward-looking statements. Such statements are based on management's current expectations and involve risks and uncertainties, including those discussed under the heading "Risk Factors" in Arcturus' Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 16, 2020 and in subsequent filings with, or submissions to, the SEC.

The statements made in this Current Report on Form 8-K and the Press Release speak only as of the date stated herein, and subsequent events and developments may cause the Company's expectations and beliefs to change. While the Company may elect to update these forward-looking statements publicly at some point in the future, the Company specifically disclaims any obligation to do so, whether as a result of new information, future events or otherwise, except as required by law. These forward-looking statements should not be relied upon as representing the Company's views as of any date after the date stated herein.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.
Exhibit No. Description of Exhibit
99.1 Press Release dated August 10, 2020

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: August 10, 2020

Arcturus Therapeutics Holdings Inc.

By:/s/ Joseph E. PayneName:Joseph E. PayneTitle:Chief Executive Officer

Arcturus Therapeutics Announces Second Quarter 2020 Financial Results and

Provides a Corporate Update

COVID-19 STARR[™] mRNA vaccine candidate, ARCT-021 (LUNAR-COV19) has initiated Phase 1/2 clinical study with Duke-NUS Medical School; Dosing anticipated imminently, initial data expected Q4

ARCT-810 (LUNAR-OTC), mRNA therapeutic candidate for ornithine transcarbamylase (OTC) deficiency,

Phase 1 healthy volunteer study continues to advance, initial results expected Q4

Successfully raised approximately \$280 million in gross proceeds through two public equity offerings in 2020 to advance promising clinical stage pipeline

Investor Conference Call at 4:30 p.m. ET Today

San Diego, Calif, Aug 10, 2020 – Arcturus Therapeutics Holdings Inc. (the "Company", "Arcturus", Nasdaq: ARCT), a leading clinical-stage messenger RNA medicines company focused on the development of infectious disease vaccines and significant opportunities within liver and respiratory rare diseases, today announced its financial results for the quarter ended June 30, 2020, and provided a corporate update.

"Arcturus has made substantial recent corporate progress highlighted by the advancement of two of our programs, ARCT-021 and ARCT-810, into clinical studies. ARCT-021 has the potential to be an effective and safe vaccine for COVID-19 with a differentiated profile characterized by a very low dose, and a single shot administration. We have also continued to advance our Phase 1 ARCT-810 clinical study in healthy volunteers. ARCT-810 is being developed for ornithine transcarbamylase (OTC) deficiency, a serious disease with limited treatment options. We look forward to obtaining clinical data from both of these important programs this year," said Joseph Payne, President & CEO of Arcturus.

Recent corporate highlights

- ARCT-021 program update: Phase 1/2 study with ARCT-021, COVID-19 STARRTM mRNA vaccine candidate (LUNAR-COV19), which is being conducted in collaboration with Duke-NUS Medical School and performed in Singapore, has initiated and commenced screening subjects. Dosing of the first subject anticipated imminently. Arcturus has provided preclinical data demonstrating a robust cellular (CD8+ cells) and balanced (Th1/Th2) immune response following ARCT-021 administration. Data demonstrate a strong antibody response (anti-spike protein IgG and 100% virus neutralization) at a very low vaccine dose, and a single administration. Neutralizing antibody levels continue to increase out to 60 days post administration. Preclinical data indicate that ARCT-021 is effectively activating the two important components of the adaptive immune response, providing strong support for the ongoing clinical program.
- The Company continues to advance its ARCT-021 manufacturing activities. With the Company's manufacturing partners, Arcturus is positioned to manufacture millions of doses in 2020 and potentially hundreds of millions of doses annually thereafter.
- Executed binding term sheet with the Israeli Ministry of Health to supply ARCT-021. A definitive supply agreement is expected shortly. Israel is the second country, in addition to Singapore, to reserve supply of ARCT-021 from the Company.
- Announced the formation of a vaccine platform Scientific Advisory Board. The SAB includes renowned experts in virology, infectious disease, vaccine development and public health.

- Initiated a Phase 1 study with ARCT-810, a mRNA-based therapeutic candidate for ornithine transcarbamylase (OTC) deficiency (LUNAR-OTC). The ARCT-810 program is supported by preclinical data in OTC deficiency murine models demonstrating that dosing of ARCT-810 results in robust OTC protein expression and improvements in ureagenesis and plasma ammonia, and increased survival. The Company expects to obtain initial Phase 1 healthy volunteer study data in Q4 2020. The phase 1b study in patients has, like many other studies, been affected by the COVID situation, but remains on track to dose by end of year.
- Successfully raised approximately \$280 million in gross proceeds through public equity offerings in 2020 to date. The Company intends to use the
 net proceeds of the offerings to develop, test and manufacture the Company's LUNAR-COV19 vaccine candidate and to continue clinical
 development of LUNAR-OTC; to advance the Company's 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.

Financial results for the quarter ended June 30, 2020

<u>Revenues in conjunction with strategic alliances and collaborations</u>: Arcturus' primary source of revenues is from license fees and collaborative payments received from research and development arrangements with pharmaceutical and biotechnology partners. For the three months ended June 30, 2020, the Company reported revenue of \$2.3 million, compared with \$10.2 million in the three months ended June 30, 2019. The decline in collaboration revenues primarily relates to a \$3.1 million decrease in reimbursements from CureVac associated with the OTC collaboration that ended in the second quarter of 2019. Additionally, in 2019 we recorded \$3.1 million in sublicense revenues related to our agreement with Synthetic Genomics which was a one-time event.

<u>Operating expenses</u>: Total operating expenses for the three months ended June 30, 2020 were \$12.4 million compared with \$10.7 million for the same period of 2019. The current quarter operating expenses were partially offset with \$3.8 million of funds earned under the Singapore vaccine grant and \$0.9 million in funds awarded by the CF Foundation.

Net loss: For the three months ended June 30, 2020, Arcturus reported a net loss of approximately \$10.3 million, or (\$0.55) per basic and diluted share, compared with a net loss in the three months ended June 30, 2019 of \$0.7 million, or (\$0.07) per basic and diluted share.

<u>Cash, cash equivalents, and investments</u>: Totaled \$136.1 million as of June 30, 2020, compared to cash and cash equivalents of \$71.4 million at December 31, 2019. Subsequent to the end of the quarter, the Company added net proceeds of \$186.3 million from our successful public offering at \$53 per share. Our Proforma Cash balance including the public offering, would have been \$322.4 million. Based on our current pipeline, the Company's current cash position is expected to be sufficient to support operations for more than two years. We are currently comfortable with our current cash position and we believe that the Company has the resources needed to drive our pipeline forward to reach several meaningful value creation milestones.

 Conference Call

 Monday August 10th @ 4:30 p.m. ET

 Domestic:
 800-754-1346

 International:
 212-231-2909

 Conference ID:
 21967092

 Webcast:
 http://public.viavid.com/index.php?id=141066

About Arcturus Therapeutics

Founded in 2013 and based in San Diego, California, Arcturus Therapeutics Holdings Inc. (Nasdaq: ARCT) is a clinical-stage mRNA medicines and vaccines company with enabling technologies: (i) LUNAR® lipid-mediated delivery, (ii) STARRTM mRNA Technology and (iii) mRNA drug substance along with drug product manufacturing expertise. Arcturus' diverse pipeline of RNA therapeutic and vaccine candidates includes self-replicating mRNA vaccine programs for SARS-CoV-2 (COVID-19) and Influenza, and other programs to potentially treat Ornithine Transcarbamylase (OTC) Deficiency, Cystic Fibrosis, Cardiovascular Disease along with partnered programs including Glycogen Storage Disease Type 3, Hepatitis B Virus, and non-alcoholic steatohepatitis (NASH). Arcturus' versatile RNA therapeutics platforms can be applied toward multiple types of nucleic acid medicines including messenger RNA, small interfering RNA, replicon RNA, antisense RNA, microRNA, DNA, and gene editing therapeutics. Arcturus' technologies are covered by its extensive patent portfolio (192 patents and patent applications, issued in the U.S., Europe, Japan, China and other countries). Arcturus' commitment to the development of novel RNA therapeutics has led to collaborations with Janssen Pharmaceuticals, Inc., part of the Janssen Pharmaceutical Companies of Johnson & Johnson, Ultragenyx Pharmaceutical, Inc., Takeda Pharmaceutical Company Limited, CureVac AG, Synthetic Genomics Inc., Duke-NUS, and the Cystic Fibrosis Foundation. For more information visit www.ArcturusRx.com

Forward Looking Statements

This press release contains forward-looking statements that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. Any statements, other than statements of historical fact included in this press release, including those regarding strategy, future operations, collaborations, the likelihood of success efficacy or safety of ARCT-021 or ARCT-810, the ability to initiate or complete preclinical and clinical development programs, including as a result of the COVID-19 pandemic, the supply and delivery of any product or substance, the likelihood that preclinical data will be predictive of clinical data, the ability to enroll subjects therein, the Company's efforts to develop a vaccine against COVID-19 and therapeutic potential thereof based on the Company's mRNA therapeutics, the timing of initiation of dosing in human trials of a vaccine against COVID-19, the ability of the Company to scale up manufacturing of vaccine doses, the potential manufacturing capabilities of the Company's partnership with Catalent, our current cash position and expected cash burn and the impact of general business and economic conditions are forward-looking statements. Arcturus may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in any forward-looking statements such as the foregoing and you should not place undue reliance on such forward-looking statements. Such statements are based on management's current expectations and involve risks and uncertainties, including those discussed under the heading "Risk Factors" in Arcturus' Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 16, 2020 and in subsequent filings with, or submissions to, the SEC. Except as otherwise required by law, Arcturus disclaims any intention or obligation to update or revise any forward-looking statements, which speak only as of the date they were made, whether as a result of ne

IR and Media Contact

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Kendall Investor Relations Carlo Tanzi, Ph.D. (617) 914-0008 ctanzi@kendallir.com

ARCTURUS THERAPEUTICS HOLDINGS INC. AND ITS SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(in thousands, except par value information)

	June 30, 2020]	December 31, 2019	
		(unaudited)			
Assets					
Current assets:					
Cash and cash equivalents	\$	136,111	\$	71,353	
Accounts receivable		2,829		2,179	
Prepaid expenses and other current assets		3,060		758	
Total current assets		142,000		74,290	
Property and equipment, net		2,610		2,349	
Operating lease right-of-use asset, net		5,218		5,134	
Equity-method investment		—		263	
Non-current restricted cash		107		107	
Total assets	\$	149,935	\$	82,143	
Liabilities and stockholders' equity					
Current liabilities:					
Accounts payable	\$	4,395	\$	5,793	
Accrued liabilities		11,883		7,134	
Deferred revenue		6,768		8,397	
Total current liabilities		23,046		21,324	
Deferred revenue, net of current portion		14,013		15,182	
Long-term debt		15,059		14,995	
Operating lease liability, net of current portion		4,394		4,850	
Total liabilities	\$	56,512	\$	56,351	
Stockholders' equity					
Common stock: \$0.001 par value; 30,000 shares authorized; 20,610 and 15,138 issued and					
outstanding at June 30, 2020 and December 30, 2019, respectively.		21		15	
Additional paid-in capital		185,110		97,445	
Accumulated deficit		(91,708)		(71,668)	
Total stockholders' equity		93,423		25,792	
Total liabilities and stockholders' equity	\$	149,935	\$	82,143	

ARCTURUS THERAPEUTICS HOLDINGS INC. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(in thousands, except per share data)

	Three Months Ended June 30,			Six Months Ended June 30,				
		2020		2019		2020		2019
Collaboration revenue	\$	2,322	\$	10,153	\$	4,968	\$	14,503
Operating expenses:								
Research and development, net		7,944		7,269		15,861		14,593
General and administrative		4,420		3,456		8,611		6,990
Total operating expenses		12,364		10,725		24,472		21,583
Loss from operations		(10,042)		(572)		(19,504)		(7,080)
Loss from equity-method investment		(100)		—		(263)		(288)
Finance expense, net		(121)		(113)		(273)		(201)
Net loss	\$	(10,263)	\$	(685)	\$	(20,040)	\$	(7,569)
Net loss per share, basic and diluted	\$	(0.55)	\$	(0.07)	\$	(1.20)	\$	(0.74)
Weighted-average shares outstanding, basic and diluted		18,794		10,412		16,657		10,255
Comprehensive loss:								
Net loss	\$	(10,263)	\$	(685)	\$	(20,040)	\$	(7,569)
Comprehensive loss	\$	(10,263)	\$	(685)	\$	(20,040)	\$	(7,569)