



## Arcturus COVID-19 Vaccine to Benefit from Duke-NUS Genetic Correlation System

March 27, 2020

### Data will help Arcturus learn more quickly about LUNAR-COV19 efficacy and safety profile

SAN DIEGO, March 27, 2020 (GLOBE NEWSWIRE) -- Arcturus Therapeutics (the "Company", NASDAQ: ARCT), a leading messenger RNA medicines and vaccines company, today provided details about the Company's strategy to rapidly learn about the safety and efficacy profile of its COVID-19 vaccine using [Duke-NUS' genetic correlation system](#).

Duke-NUS, the Company's partner, developed a process to track genetic changes and their correlations that augment testing of vaccines. There are specific gene changes that correlate directly with efficacy, particularly the level of neutralizing antibody titers. There are also specific gene changes that correlate with safety-related adverse events, such as headache and fever. Prior studies have shown these changes correlate with longer term outcomes. These gene expression changes can be measured within the first 5 days following vaccination and the data may also guide dose selection.

"The data generated from the Duke-NUS system gives us the ability to more efficiently select the dose and help streamline our vaccine development program, potentially accelerating our timeline," said Pad Chivukula, Ph.D., Chief Scientific Officer of Arcturus.

Arcturus' COVID-19 vaccine, LUNAR-COV19, is based on its STARR™ and LUNAR® technologies. For more information, please contact Arcturus by email at [Vax@ArcturusRx.com](mailto:Vax@ArcturusRx.com) or visit our website [www.ArcturusRx.com](http://www.ArcturusRx.com)

#### About Arcturus Therapeutics

Founded in 2013 and based in San Diego, California, Arcturus Therapeutics Holdings Inc. (Nasdaq: ARCT) is an mRNA medicines and vaccines company with enabling technologies – LUNAR® lipid-mediated delivery & STARR™ mRNA Technology – and mRNA drug substance along with drug product manufacturing. Arcturus' diverse pipeline of RNA therapeutics includes programs to potentially treat Ornithine Transcarbamylase (OTC) Deficiency, Cystic Fibrosis, Coronavirus (COVID-19), Glycogen Storage Disease Type 3, Hepatitis B, 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 (182 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](http://www.Arcturusrx.com)

#### About Duke-NUS Medical School

Duke-NUS is Singapore's flagship graduate entry medical school, established in 2005 with a strategic, government-led partnership between two world-class institutions: Duke University School of Medicine and the National University of Singapore (NUS). Through an innovative curriculum, students at Duke-NUS are nurtured to become multi-faceted 'Clinicians Plus' poised to steer the healthcare and biomedical ecosystem in Singapore and beyond. A leader in ground-breaking research and translational innovation, Duke-NUS has gained international renown through its five signature research programmes and eight centres. The enduring impact of its discoveries is amplified by its successful Academic Medicine partnership with Singapore Health Services (SingHealth), Singapore's largest healthcare group. This strategic alliance has spawned 15 Academic Clinical Programmes, which harness multi-disciplinary research and education to transform medicine and improve lives. For more information, please visit <https://www.duke-nus.edu.sg/>

#### 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 of the Company's Coronavirus (COVID-19) vaccine or other products, the status of preclinical and clinical development programs and the planned initiation of clinical trials 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 new information, future events or circumstances or otherwise.

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