Arcturus Announces Collaboration with CSL to Develop and Commercialize Self-amplifying mRNA Vaccines

November 1, 2022

- *Arcturus to receive upfront payment of $200 million and more than $4 billion in potential development and commercial milestones*
- *40% profit sharing for COVID-19 vaccines, up to double digit royalties for influenza, pandemic preparedness and three additional respiratory infectious disease vaccines*
- *Combines Arcturus' self-amplifying mRNA vaccine technologies with CSL's world-leading capabilities as a commercial scale manufacturer and global distributor of influenza and pandemic vaccines*

SAN DIEGO--(BUSINESS WIRE)--Nov. 1, 2022-- 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 a strategic collaboration with CSL Seqirus, a global vaccine leader, for the research, development, manufacture, and global commercialization of vaccines. CSL Seqirus' vaccine portfolio includes the world's second largest influenza vaccine franchise. CSL Seqirus is part of CSL Limited (ASX:CSL; USOTC:CSLLY).

Under the terms of the agreement, Arcturus will provide CSL Seqirus with a license to their self-amplifying mRNA technology to support the research, development, manufacture, and commercialization of vaccines for SARS-CoV-2 (COVID-19), influenza, pandemic preparedness, as well as three other globally prevalent respiratory infectious diseases.

The collaboration combines CSL Seqirus' established global vaccine commercial and manufacturing infrastructure with Arcturus' manufacturing expertise and innovative STARR™ self-amplifying mRNA vaccine and LUNAR® delivery platform technologies. Arcturus will bring its mRNA design and modification expertise, LUNAR® lipid nanoparticle (LNP) technology and manufacturing know-how, which has enabled the Company's low dose, lyophilized and durable self-amplifying mRNA vaccines against COVID-19. Previously reported clinical results from ongoing ARCT-154 studies have demonstrated a favorable efficacy and safety profile with sustained neutralizing antibodies against COVID-19, including recent variants of concern.

"We are excited to embark on this collaboration with CSL Seqirus, a respected world leader in the development, manufacture and commercialization of vaccines," said Joseph Payne, President and CEO of Arcturus Therapeutics. "We look forward to a long and fruitful partnership as we work together to develop next generation self-amplifying mRNA vaccines to protect against the most prevalent infectious diseases."

Summary of Deal Terms and Financial Considerations

Under the terms of the agreement, Arcturus will provide CSL Seqirus with a license to its STARR™ self-amplifying mRNA technology, LUNAR® lipid-mediated delivery, along with mRNA drug substance and drug product manufacturing expertise. CSL Seqirus will lead development and commercialization of vaccines under the collaboration. The collaboration plans to advance vaccines against SARS-CoV-2 (COVID-19), influenza, pandemic preparedness as well as three other globally prevalent respiratory infectious diseases.

Arcturus will receive $200 million upfront and is eligible to receive over $1.3 billion in development milestones and over $3 billion in commercial milestones. In addition, the Company is eligible to receive a 40% net profit share for COVID-19 vaccine products and up to double-digit royalties for vaccines against flu, pandemic preparedness and three other respiratory pathogens.

J.P. Morgan Securities LLC acted as financial advisor to Arcturus on the transaction.

About Arcturus Therapeutics

Founded in 2013 and based in San Diego, California, Arcturus Therapeutics Holdings Inc. (Nasdaq: ARCT) is a global, late-stage clinical mRNA medicines and vaccines company with enabling technologies: (i) LUNAR® lipid-mediated delivery, (ii) STARR™ mRNA Technology (samRNA) and (iii) mRNA drug substance along with drug product manufacturing expertise. Arcturus' diverse pipeline of RNA therapeutic and vaccine candidates includes mRNA vaccine programs for SARS-CoV-2 (COVID-19) and Influenza, and other programs to potentially treat ornithine transcarbamylase (OTC) deficiency, and cystic fibrosis, along with partnered programs including glycogen storage disease type III, and hepatitis B virus. 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 (patents and patent applications issued in the U.S., Europe, Japan, China and other countries). For more information, visit www.ArcturusRx.com. In addition, please connect with us on Twitter and LinkedIn.

About CSL

CSL (ASX:CSL; USOTC:CSLLY) is a leading global biotechnology company with a dynamic portfolio of lifesaving medicines, including those that treat haemophilia and immune deficiencies, vaccines to prevent influenza, and therapies in iron deficiency, dialysis and nephrology. Since our start in 1916, we have been driven by our promise to save lives using the latest technologies. Today, CSL – including our three businesses, CSL Behring, CSL Seqirus and CSL Vifor – provides lifesaving products to patients in more than 100 countries and employs 30,000 people. Our unique combination of

commercial strength, R&D focus and operational excellence enables us to identify, develop and deliver innovations so our patients can live life to the fullest. For inspiring stories about the promise of biotechnology, visit CSLBehring.com/Vita and follow us on Twitter.com/CSL. For more information about CSL, visit www.CSL.com.

About CSL Seqirus

CSL Seqirus is part of CSL Limited (ASX: CSL). As one of the largest influenza vaccine providers in the world, CSL Seqirus is a major contributor to the prevention of influenza globally and a transcontinental partner in pandemic preparedness. With state-of-the-art production facilities in the U.S., the U.K. and Australia, and leading R&D capabilities, CSL Seqirus utilizes egg, cell and adjuvant technologies to offer a broad portfolio of differentiated influenza vaccines in more than 20 countries around the world. For more information about CSL Seqirus, visit www.seqirus.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, are forward-looking statements, including those regarding strategy, the expectations for beginning the collaboration with CSL Seqirus, including receiving clearance under the Hart-Scott-Rodino Antitrust Improvements Act and satisfying other closing conditions, or the likelihood of success of the collaboration with CSL Seqirus or any collaborations, the likelihood of success of the Company's efforts to design and develop a vaccine against COVID, influenza or any other infectious disease, the strength or potential of the Company's platform, the future activities under and effectiveness of the collaboration, and the impact of general business and economic conditions. 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. These statements are only current predictions or expectations, and are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements, including those discussed under the heading "Risk Factors" in Arcturus' most recent Annual Report on Form 10-K, and in subsequent filings with, or submissions to, the SEC, which are available on the SEC's website at www.sec.gov. 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.

Trademark Acknowledgements

The Arcturus logo and other trademarks of Arcturus appearing in this announcement, including LUNAR® and STARR™, are the property of Arcturus. All other trademarks, services marks, and trade names in this announcement are the property of their respective owners.

View source version on businesswire.com: https://www.businesswire.com/news/home/20221101006199/en/

IR and Media Contacts
Arcturus Therapeutics
IR@ArcturusRx.com

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

Source: Arcturus Therapeutics Holdings Inc.