Vir and Alnylam Expand Collaboration to Advance RNAi Therapeutics for the Treatment of Coronavirus Infection, Including COVID-19

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SAN FRANCISCO & CAMBRIDGE, Mass.--(BUSINESS WIRE)--Vir Biotechnology, Inc. (Nasdaq: VIR) and Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY) today announced an expansion of their existing collaboration to include the development and commercialization of RNAi therapeutics targeting SARS-CoV-2, the virus that causes the disease COVID-19. Under the agreement, the companies will utilize Alnylam's recent advances in lung delivery of novel conjugates of siRNA – the molecules that mediate RNAi – together with Vir's infectious disease expertise and established capabilities, to bring forward one or more siRNAs to treat SARS-CoV-2 and potentially other coronaviruses as well. The collaboration will focus on development of siRNAs that Alnylam recently identified that target highly conserved regions of coronavirus RNAs.

Alnylam has designed and synthesized over 350 siRNAs targeting all available SARS-CoV and SARS-CoV-2 genomes, which will be screened in *in vitro* potency assays. Potent siRNA lead candidates will be further evaluated by scientists at Vir for *in vitro* and *in vivo* anti-viral activity, leading to the selection of a development candidate (DC).

Vir will lead all development and commercialization of any selected DCs. At clinical proof of concept, Alnylam will have an option to share equally in the profits and losses associated with the development and commercialization of the coronavirus program. Alternatively, Alnylam may elect to earn development and commercialization milestones and royalties on net sales of products resulting from the collaboration in amounts agreed upon for the coronavirus program. This new program expands the companies' existing licensing agreement announced in 2017 to now develop up to six novel siRNAs to treat infectious diseases.

"Given the scope and speed of the COVID-19 outbreak, Vir is seeking multiple approaches that combine our expertise in infectious disease with that of current and new partners to respond rapidly," said George Scangos, Ph.D., Chief Executive Officer of Vir Biotechnology. "Alnylam has been an excellent partner, and our complementary capabilities made this a compelling opportunity to address this growing public health crisis."

"RNAi is a powerful, natural cellular mechanism that can be harnessed to develop a broad range of innovative medicines, including anti-viral therapies. Our recent pre-clinical progress in extra-hepatic delivery of siRNAs has now been extended to the lung, and we're encouraged that these results could potentially translate to humans," said John Maraganore, Ph.D., Chief Executive Officer of Alnylam Pharmaceuticals. "We believe RNAi therapeutics represent a promising approach for targeting coronaviruses, like SARS-CoV-2. As the leader in RNAi therapeutics, we at Alnylam are committed to doing our part in joining other biopharmaceutical companies, like Vir, to address this emerging outbreak."

The companies are currently collaborating on VIR-2218 (ALN-HBV02), a novel, investigational RNAi therapeutic for the treatment of chronic hepatitis B virus (HBV) infection, the first program to enter the clinic as a part of the infectious disease collaboration. The safety and efficacy of VIR-2218 are currently being investigated in an ongoing Phase 1/2 study.

About RNAi

RNAi (RNA interference) is a natural cellular process of gene silencing that represents one of the most promising and rapidly advancing frontiers in biology and drug development today. Its discovery has been heralded as "a major scientific breakthrough that happens once every decade or so," and was recognized with the award of the 2006 Nobel Prize for Physiology or Medicine. By harnessing the natural biological process of RNAi occurring in our cells, a new class of medicines, known as RNAi therapeutics, is now a reality. Small interfering RNA (siRNA), the molecules that mediate RNAi and comprise Alnylam's RNAi therapeutic platform, function upstream of today's medicines by potently silencing messenger RNA (mRNA) – the genetic precursors – that encode for disease-causing proteins, thus preventing them from being made. This is a revolutionary approach with the potential to transform the care of patients with genetic and other diseases.

About Vir Biotechnology

Vir Biotechnology is a clinical-stage immunology company focused on combining immunologic insights with cutting-edge technologies to treat and prevent serious infectious diseases. Vir has assembled four technology platforms that are designed to stimulate and enhance the immune system by exploiting critical observations of natural immune processes. Its current development pipeline consists of five product candidates targeting hepatitis B virus, influenza A, human immunodeficiency virus and tuberculosis. For more information, please visit www.vir.bio.

About Alnylam

Alnylam (Nasdaq: ALNY) is leading the translation of RNA interference (RNAi) into a whole new class of innovative medicines with the potential to transform the lives of people afflicted with rare genetic, cardio-metabolic, hepatic infectious, and central nervous system (CNS)/ocular diseases. Based on Nobel Prize-winning science, RNAi therapeutics represent a powerful, clinically validated approach for the treatment of a wide range of severe and debilitating diseases. Founded in 2002, Alnylam is delivering on a bold vision to turn scientific possibility into reality, with a robust RNAi therapeutics platform. Alnylam's commercial RNAi therapeutic products are ONPATTRO® (patisiran), approved in the U.S., EU, Canada, Japan, Switzerland, and Brazil, and GIVLAARI® (givosiran), approved in the U.S. and EU. Alnylam has a deep pipeline of investigational medicines, including five product candidates that are in late-stage development. Alnylam is executing on its "Alnylam 2020" strategy of building a multi-product, commercial-stage biopharmaceutical company with a sustainable pipeline of RNAi-based medicines to address the needs of patients who have limited or inadequate treatment options. Alnylam is headquartered in Cambridge, MA. For more information about our people, science and pipeline, please

visit www.alnylam.com and engage with us on Twitter at @Alnylam or on LinkedIn.

Vir Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend," "potential" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on Vir's expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties. Actual results may differ materially from these forward-looking statements. Forward-looking statements contained in this press release include statements regarding the potential benefits of the expansion of the collaboration with Alnylam, whether or not any DCs will be identified and selected, whether or not any DCs will be identified and selected, whether or not any DCs will be successfully developed and commercialized, and Vir's ability to address the emerging public health epidemic. Many factors may cause differences between current expectations and actual results including unexpected safety or efficacy data observed during preclinical or clinical studies, challenges in identifying and selecting DCs, difficulty in collaborating with other companies or government agencies, and challenges in accessing manufacturing capacity and the development of treatments for infectious diseases. Other factors that may cause actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in Vir's filings with the U.S. Securities and Exchange Commission, including the section titled "Risk Factors" contained therein. Except as required by law, Vir assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

Alnylam Forward Looking Statements

Various statements in this release concerning Alnylam's future expectations, plans and prospects, including, without limitation, Alnylam's views and plans with respect to the potential for RNAi therapeutics, including the translation to humans of recent pre-clinical progress in delivery of siRNAs to the lung, the potential for siRNAs targeting highly conserved regions of SARS-CoV-2 – the virus that causes COVID-19 – and other CoV RNAs, its ability to collaborate with Vir to address the emerging public health epidemic , and expectations regarding the continued execution on its "Alnylam 2020" guidance for the advancement and commercialization of RNAi therapeutics, constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Actual results and future plans may differ materially from those indicated by these forward-looking statements as a result of various important risks, uncertainties and other factors, including, without limitation: Alnylam's ability to discover and develop novel drug candidates, including candidates targeting CoV RNAs, and delivery approaches, including to the lung, and to successfully demonstrate the efficacy and safety of its product candidates, including candidates targeting CoV RNAs; the pre-clinical and clinical results for its product candidates, which may not be replicated or continue to occur in other subjects or in additional studies or otherwise support further development of product candidates for a specified indication or at all; actions or advice of regulatory agencies, which may affect the design, initiation, timing, continuation and/or progress of clinical trials or result in the need for additional pre-clinical and/or clinical testing; delays, interruptions or failures in the manufacture and supply of its product candidates or its marketed products; obtaining, maintaining and protecting intellectual property; intellectual property matters including potential patent litigation relating to its platform, products or product candidates; obtaining regulatory approval for its product candidates, including lumasiran and any product candidates targeting CoV RNAs, and maintaining regulatory approval and obtaining pricing and reimbursement for its products, including ONPATTRO and GIVLAARI; progress in continuing to establish a commercial and ex-United States infrastructure; successfully launching, marketing and selling its approved products globally, including ONPATTRO and GIVLAARI, and achieve net product revenues for ONPATTRO within its expected range during 2020; Alnylam's ability to successfully expand the indication for ONPATTRO in the future; competition from others using technology similar to Alnylam's and others developing products for similar uses; Alnylam's ability to manage its growth and operating expenses within the ranges of its expected guidance and achieve a self-sustainable financial profile in the future, obtain additional funding to support its business activities, and establish and maintain strategic business alliances and new business initiatives; Alnylam's dependence on third parties, including Regeneron, for development, manufacture and distribution of certain products, including eye and CNS products, and Ironwood, for assistance with the education about and promotion of GIVLAARI in the U.S.; the outcome of litigation; the risk of government investigations; and unexpected expenditures, as well as those risks more fully discussed in the "Risk Factors" filed with Alnylam's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) and in other filings that Alnylam makes with the SEC. In addition, any forward-looking statements represent Alnylam's views only as of today and should not be relied upon as representing its views as of any subsequent date. Alnylam explicitly disclaims any obligation, except to the extent required by law, to update any forward-looking statements.

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