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Alnylam Acquires Investigational RNAi Therapeutic Assets from Merck

- Strategic Transaction Positions RNAi Assets for Future Advancement through Alnylam's Commitment to RNAi Therapeutics -

CAMBRIDGE, Mass.--(BUSINESS WIRE)-- Alnylam Pharmaceuticals, Inc. (Nasdaq:ALNY), a leading RNAi therapeutics company, announced today the acquisition of Merck's wholly owned subsidiary Sirna Therapeutics, Inc. ("Sirna Therapeutics"), comprising intellectual property and RNAi assets including pre-clinical therapeutic candidates, chemistry, siRNA-conjugate and other delivery technologies.

"We are excited to enter this agreement with Merck. We believe the acquisition of Sirna Therapeutics will complement and extend our own progress and continued focus on RNAi therapeutics, including siRNA-conjugate technologies," said John Maraganore, Ph.D., Chief Executive Officer of Alnylam. "Indeed, we believe that the acquisition of Merck's RNAi technologies and intellectual property will further our efforts to build a new class of medicines, advancing them to patients in need."

Under the agreement, in exchange for acquiring the stock of Sirna Therapeutics, Alnylam will pay Merck an upfront payment of $175 million in cash and equity ($25 million cash/$150 million in Alnylam common stock). In addition, Merck is eligible to receive up to $105 million in developmental and sales milestone payments per product, as well as single-digit royalties, associated with the progress of certain pre-clinical candidates discovered by Merck. Merck is also eligible to receive up to $10 million in milestone payments and single-digit royalties on Alnylam products covered by Sirna Therapeutics' patent estate.

"Scientists at Merck have made important contributions to the advancement of RNAi therapeutics particularly in the design and engineering of RNAi molecules with enhanced drug-like properties," said Iain D. Dukes, Senior Vice President Business Development & Licensing, Merck Research Laboratories. "We believe this agreement positions Sirna Therapeutics' therapeutic RNAi assets with a company that has the focus and commitment necessary to harness their potential. This is consistent with our strategy to reduce emphasis on platform technologies and prioritize our R&D efforts to focus on product candidates capable of providing unambiguous promotable advantages to patients and payers."

Merck built upon the acquisition of Sirna Therapeutics with technologies that will now be integrated into Alnylam's platform for delivery of RNAi therapeutics. These include multiple granted patents and a range of chemistry, siRNA-conjugate and other delivery technologies for application to RNAi therapeutics. In addition, the Sirna Therapeutics assets include certain pre-clinical candidates.

The transaction is subject to customary closing conditions, including the requirements under the Hart Scott-Rodino Antitrust Improvements Act.

About Alnylam Pharmaceuticals

Alnylam is a biopharmaceutical company developing novel therapeutics based on RNA interference, or RNAi. The company is leading the translation of RNAi as a new class of innovative medicines with a core focus on RNAi therapeutics as genetic medicines, including programs as part of the company's "Alnylam 5x15^{TM}" product strategy. Alnylam's genetic medicine programs are RNAi therapeutics directed toward genetically defined targets for the treatment of serious, life-threatening diseases with limited treatment options for patients and their caregivers. These include: patisiran (ALN-TTR02), an intravenously delivered RNAi therapeutic targeting transthyretin (TTR) for the treatment of TTR-mediated amyloidosis (ATTR) in patients with familial amyloidotic polyneuropathy (FAP); ALN-TTRsc, a subcutaneously delivered RNAi therapeutic targeting TTR for the treatment of ATTR in patients with familial amyloidotic cardiomyopathy (FAC); ALN-AT3, an RNAi therapeutic targeting antithrombin (AT) for the treatment of hemophilia and rare bleeding disorders (RBD); ALN-AS1, an RNAi therapeutic targeting aminolevulinate synthase-1 (ALAS-1) for the treatment of hepatic porphyrias including acute intermittent porphyria (AIP); ALN-CC5, an RNAi therapeutic targeting complement component C5 for the treatment of complement-mediated diseases; ALN-PCS, an RNAi therapeutic targeting PCSK9 for the treatment of hypercholesterolemia; ALN-AAT, an RNAi therapeutic targeting alpha-1-antitrypsin (AAT) for the treatment of AAT deficiency liver disease; ALN-TMP, an RNAi therapeutic targeting TMPRSS6 for the treatment of beta-thalassemia and iron-overload disorders; and ALN-ANG, an RNAi therapeutic for the treatment of genetic forms of mixed hyperlipidemia and severe hypertriglyceridemia, amongst other programs. As part of its "Alnylam 5x15" strategy, as updated in early 2014, the company expects to have six to seven genetic medicine product candidates in clinical development - including at least two programs in Phase 3 and five to six programs with human proof of concept - by the end of 2015. The company's demonstrated commitment to RNAi therapeutics has enabled it to form major alliances with leading companies including Merck, Medtronic, Novartis, Biogen Idec, Roche, Takeda, Kyowa Hakko Kirin, Cubist, GlaxoSmithKline, Ascletis, Monsanto, The Medicines Company, and Genzyme, a Sanofi company. In January 2014, Alnylam

agreed to acquire Sirna Therapeutics, a wholly owned subsidiary of Merck. In addition, Alnylam holds an equity position in Regulus Therapeutics Inc., a company focused on discovery, development, and commercialization of microRNA therapeutics. Alnylam scientists and collaborators have published their research on RNAi therapeutics in over 200 peer-reviewed papers, including many in the world's top scientific journals such as *Nature*, *Nature Medicine*, *Nature Biotechnology*, *Cell,* the *New England Journal of Medicine,* and *The Lancet*. Founded in 2002, Alnylam maintains headquarters in Cambridge, Massachusetts. For more information, please visit www.alnylam.com.

Alnylam Forward-Looking Statements

Various statements in this press release concerning Alnylam's future expectations, plans and prospects, including without limitation, Alnylam's views with respect to the potential value of the assets being acquired and its ability to further its efforts to build a new class of medicines, the potential timing of the closing of the transaction, as well as the potential for RNAi therapeutics, including the programs in its "Alnylam 5x15" pipeline, constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including, without limitation, Alnylam's ability to discover and develop novel drug candidates and delivery approaches, successfully demonstrate the efficacy and safety of its drug candidates, the pre-clinical and clinical results for its product candidates, which may not support further development of product candidates, actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials, obtaining, maintaining and protecting intellectual property, Alnylam's ability to enforce its patents against infringers and defend its patent portfolio against challenges from third parties, obtaining regulatory approval for products, competition from others using technology similar to Alnylam's and others developing products for similar uses, Alnylam's ability to 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 for development, manufacture, marketing, sales and distribution of products, the outcome of litigation, and unexpected expenditures, as well as those risks more fully discussed in the "Risk Factors" filed with Alnylam's most recent Quarterly Report on Form 10-Q 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 to update any forward-looking statements.

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