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Alnylam and Takeda Form Strategic Worldwide Platform Alliance in RNAi Therapeutics

– Alnylam Selects Takeda as its Sole Asian Strategic Partner and
Obtains Options for 50-50 Development and Commercialization of Takeda RNAi Therapeutic
Programs in U.S. Market –

– Takeda Gains Access and Enablement to Alnylam’s Leading RNAi Therapeutics Technology
and Intellectual Property in Fields of Oncology and Metabolic Disease –

– Alliance Includes $150 Million in Upfront and Near-Term Technology Transfer Payments, and
Additional Future Research & Development and Commercial Milestones –

CAMBRIDGE, Mass., USA and OSAKA, Japan, May 27, 2008 – Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY) and Takeda Pharmaceutical Company Limited (TSE: 4502) today announced that they have formed a strategic platform alliance in RNAi therapeutics in the fields of oncology and metabolic disease with the option to expand to additional therapeutic areas. This landmark alliance is the first major RNAi therapeutics partnership between a Japanese pharmaceutical company and a U.S. biotechnology company, representing a new frontier in the advancement of RNAi therapeutics to patients on a global basis.

RNAi is an entirely new approach for the discovery of breakthrough medicines that utilizes a natural mechanism found within the body to inhibit expression of certain genes. Harnessing the activity of RNAi creates a direct opportunity to develop specific and potent new medicines for the treatment of a broad range of diseases, including those that are difficult to treat with today’s drug approaches. The discovery of RNAi was awarded the 2006 Nobel Prize and the advancement of RNAi is recognized as one of the most important advances in biomedical sciences in decades.
“We are very pleased and honored to have a strategic platform partnership with Takeda, one of the world’s leading pharmaceutical companies. As the first RNAi technology partnership with a pharmaceutical company located in Asia, this new alliance expands the advancement of RNAi therapeutics to patients on a global basis,” said John Maraganore, Ph.D., Chief Executive Officer of Alnylam. “Across multiple dimensions, this new partnership is a major event in Alnylam’s efforts to build a leading biopharmaceutical company. A particularly important element in this new platform alliance is Alnylam’s opportunity to co-develop and co-commercialize Takeda RNAi therapeutic products with Takeda in the U.S. market.”

“We are excited to work with Alnylam, as the leading worldwide company in the field of RNAi therapeutics with a strong commitment to scientific excellence and an unparalleled intellectual property position,” said Yasuchika Hasegawa, President of Takeda. “We believe this alliance will accelerate our initiatives to establish the foundation for RNAi drug discovery supported by Alnylam’s platform technologies and know-how. We expect that our product portfolio will be enhanced by the addition of RNAi therapeutics to our current small molecule and anti-body research platforms.”

This collaboration provides Takeda with broad, worldwide, non-exclusive access to and enablement with Alnylam’s RNAi therapeutics platform technology and intellectual property in the fields of oncology and metabolic disease, with the right to expand the number of therapeutic fields in the future. The agreement also includes the transfer of platform technology from Alnylam to Takeda, a collaboration and cross-license of delivery technologies between the two companies, and a drug discovery collaboration on certain RNAi therapeutic targets, subject to certain Alnylam third party obligations.

Takeda becomes Alnylam’s strategic partner for RNAi therapeutics over a five-year period and the only Asian company to obtain a right of first negotiation to develop and commercialize Alnylam RNAi therapeutic development programs for the Asian market, excluding Alnylam’s ALN-RSV01 program. In addition, Alnylam obtains opt-in options to co-develop and co-commercialize Takeda RNAi therapeutic programs in the U.S. market on a 50-50 basis.

The partnership includes $100 million in upfront payments and $50 million in near-term technology transfer payments for a non-exclusive license in two therapeutic fields and is valued at potentially over $1 billion in future research and development and commercial milestones, upon successful commercialization of multiple products. At Takeda’s option, the scope of the partnership can be expanded to include additional fields with a $50 million per field expansion payment. Alnylam is also eligible to receive research and development funding related to the drug discovery collaboration. In addition, Alnylam is eligible to receive up to $171 million in development and commercial milestone payments and significant royalties per product. Alnylam plans to update financial guidance when it announces its second quarter 2008 financial results.

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About RNA Interference (RNAi)
RNAi (RNA interference) is a revolution in biology, representing a breakthrough in understanding how genes are turned on and off in cells, and a completely new approach to drug discovery and development. Its discovery has been heralded as “a major scientific breakthrough that happens once every decade or so,” and represents one of the most promising and rapidly advancing frontiers in biology and drug discovery today which was awarded the 2006 Nobel Prize for Physiology or Medicine. RNAi is a natural process of gene silencing that occurs in organisms ranging from plants to mammals. By harnessing the natural biological process of RNAi occurring in our cells, the creation of a major new class of medicines, known as RNAi therapeutics, is on the horizon. RNAi therapeutics target the cause of diseases by potently silencing specific messenger RNAs (mRNAs), thereby preventing disease-causing proteins from being made. RNAi therapeutics have the potential to treat disease and help patients in a fundamentally new way.

About Alnylam Pharmaceuticals
Alnylam is a biopharmaceutical company developing novel therapeutics based on RNA interference, or RNAi. The company is applying its therapeutic expertise in RNAi to address significant medical needs, many of which cannot effectively be addressed with small molecules or antibodies, the current major classes of drugs. Alnylam is leading the translation of RNAi as a new class of innovative medicines with peer-reviewed research efforts published in the world’s top scientific journals including Nature, Nature Medicine, and Cell. The company is leveraging these capabilities to build a broad pipeline of RNAi therapeutics; its most advanced program is in Phase II human clinical trials for the treatment of respiratory syncytial virus (RSV) infection. In addition, the company is developing RNAi therapeutics for the treatment of a wide range of disease areas, including hypercholesterolemia, liver cancers, and Huntington’s disease. The company’s leadership position in fundamental patents, technology, and know-how relating to RNAi has enabled it to form major alliances with leading companies including Medtronic, Novartis, Biogen Idec, Roche, and Takeda. To reflect its outlook for key scientific, clinical, and business initiatives, Alnylam has established “RNAi 2010” which includes the company’s plan to significantly expand the scope of delivery solutions for RNAi therapeutics, have four or more programs in clinical development, and to form four or more new major business collaborations, all by the end of 2010. Alnylam is a joint owner of Regulus Therapeutics LLC, a joint venture focused on the discovery, development, and commercialization of microRNA therapeutics. Founded in 2002, Alnylam maintains headquarters in Cambridge, Massachusetts. For more information, visit www.alnylam.com.

About Takeda
Founded in 1781 and located in Osaka, Japan, Takeda is a research-based global company with its main focus on pharmaceuticals. As the largest pharmaceutical company in Japan and one of the global leaders of the industry, Takeda is committed to striving toward better health for individuals and progress in medicine by developing superior pharmaceutical products.

Additional information about Takeda is available through its corporate website, www.takeda.com.
Alnylam Forward-Looking Statements

Various statements in this release concerning Alnylam’s future expectations, plans and prospects, 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 risks related to: Alnylam’s approach to discover and develop novel drugs, which is unproven and may never lead to marketable products; obtaining, maintaining and protecting intellectual property; Alnylam’s ability to enforce its patents against infringers and to defend its patent portfolio against challenges from third parties; Alnylam’s ability to obtain additional funding to support its business activities; Alnylam's ability to realize future milestones and royalties as well as co-development and co-commercialization opportunities; Alnylam’s dependence on third parties for development, manufacture, marketing, sales and distribution of products; obtaining regulatory approval for products; competition from others using technology similar to Alnylam’s and others developing products for similar uses; Alnylam’s dependence on collaborators; and Alnylam’s short operating history; as well as those risks more fully discussed in the “Risk Factors” section of its most recent quarterly report on Form 10-Q on file with the Securities and Exchange Commission. 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 does not assume any obligation to update any forward-looking statements.

Takeda Forward-Looking Statements

This press release contains forward-looking statements regarding the Company's plans, outlook, strategies and results for the future. All forward-looking statements are based on judgments derived from the information available to the Company at this time. Certain risks and uncertainties could cause the Company's actual results to differ materially from any projections presented in this press release. These risks and uncertainties include, but are not limited to, the economic circumstances surrounding the Company's business; competitive pressure; relative laws and regulations; product development programs; and changes in exchange rates. We assume no obligation to update or reverse any forward-looking statements or other information contained in this press release, whether as a result of new information, future events, or otherwise.

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