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**MEDIA RELEASE • COMMUNIQUE AUX MEDIAS • MEDIENMITTEILUNG**

## **Novartis and Alnylam announce new collaboration to develop RNAi therapeutics for pandemic flu**

**Basel, Switzerland, and Cambridge, Massachusetts, February 21, 2006** – Novartis and Alnylam Pharmaceuticals, Inc. announced today the formation of a new collaboration to develop therapeutics for pandemic flu based on RNA interference (RNAi).

Novartis and Alnylam will advance RNAi therapeutics for pandemic flu to initial clinical testing and, if successful, regulatory approval. This new alliance leverages Alnylam's expertise in RNAi as well as the capabilities and experience of Novartis in bringing innovative therapeutics to patients. Financial terms were not disclosed.

The two companies already have a multi-year alliance signed in September 2005 that is focused on the discovery of innovative therapeutics based on RNAi across multiple disease areas in the Novartis research portfolio.

"We are delighted to work with our colleagues at Alnylam to devise new therapies for influenza. The influenza virus, through rapid mutation and potential inter-species transfer, represents an epidemic threat to the citizens of all countries. Multiple therapies are likely to be required both to prevent and to treat influenza," said Mark Fishman, M.D., President of the Novartis Institutes for BioMedical Research.

"An RNAi therapeutic could be an innovative modality, crippling the virus through incapacitating several genes. In addition, such drugs might be adapted to new strains as they emerge. Of course the technology is young and is just now being tested in early clinical trials, but our hope is that it will open new therapeutic frontiers," said Dr. Fishman.

Alnylam announced in December 2005 that it had selected its pandemic flu program for development. The company also announced that it had received initial government funding for the program from the US Department of Defense's "Defense Advanced Research Projects Agency" (DARPA). The program is seeking to develop RNAi therapeutic targeting sequences, both specific for particular strains and conserved strains across all flu strains, including those of avian origin. This RNAi therapeutic would be expected to have anti-viral activity against any newly emerging strain of influenza that may cause human disease and lead to a pandemic, including any variant of the H5N1 strain.

"Having experienced the benefits of collaborating with Novartis over the last several months, we are delighted to partner with them in tackling what may be the biggest public health threat facing the world today," said John Maraganore, Ph.D., President and Chief Executive Officer of Alnylam Pharmaceuticals. "Working together with Novartis and government agencies, we are confident in our ability to harness the power of RNAi to help prepare for the possibility of a global influenza pandemic. This new collaboration significantly enhances the efforts we announced in December 2005 to advance our RNAi therapeutic program in pandemic flu toward the clinic."

### **About pandemic influenza**

An influenza pandemic is a global outbreak of disease that occurs when a new flu virus appears in the human population, causes serious illness, and spreads easily from person to person. Experts believe that current vaccines and existing anti-viral agents may not be sufficient to protect against newly emerging strains of influenza virus. Over the last several years, a highly virulent new strain of avian flu (H5N1) has become endemic in the poultry population in Southeast Asia, has spread to parts of Europe and Africa, and has caused significant mortality in humans that have been infected. The World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) have expressed major concern about the potential for this virus to mutate into a form that could cause a global pandemic of human disease.

### **About RNA interference (RNAi)**

RNA interference, or RNAi, is a naturally occurring mechanism within cells for selectively silencing and regulating specific genes. Since many diseases are caused by the inappropriate activity of specific genes, the ability to silence genes selectively through RNAi could provide a new way to treat a wide range of human diseases. RNAi is induced by small, double-stranded RNA molecules. One method to activate RNAi is with chemically synthesized small interfering RNAs, or siRNAs, which are double-stranded RNAs that are targeted to a specific disease-associated gene. The siRNA molecules are used by the natural RNAi machinery in cells to cause highly targeted gene silencing.

This release contains certain forward-looking statements relating to the Company's business, which can be identified by the use of forward-looking terminology such as "will advance", "are likely to", "could be", "might be adapted to", "our hope is that it will open", "would be expected", "may lead", "may not be", "potential", "could cause", "could provide", "may be", "are confident in", "to help prepare for the possibility", or similar expressions, or by express or implied discussions regarding the potential development and commercialization of new products or regarding potential future sales from any such products. Such statements reflect the current views of the Company with respect to future events and are subject to certain risks, uncertainties and assumptions. Many factors could cause the actual results to be materially different from any future results, performances or achievements that may be expressed or implied by such forward-looking statements. There can be no guarantee that the aforementioned collaboration and research will lead to the development or commercialization of any new products in any market, or that any such products will reach any particular sales levels. Any such commercialization or sales can be affected by, among other things, uncertainties relating to product development and clinical trials, regulatory actions or delays or government regulation generally, the ability to obtain or maintain patent or other proprietary intellectual property protection and competition in general, as well as factors discussed in the Company's Form 20-F filed with the Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. The Company is providing this information as of this date and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

### **About Novartis**

Novartis AG (NYSE: NVS) is a world leader in offering medicines to protect health, treat disease and improve well-being. Our goal is to discover, develop and successfully market innovative products to treat patients, ease suffering and enhance the quality of life. Novartis is the only company with leadership positions in both patented and generic pharmaceuticals. We are strengthening our medicine-based portfolio, which is focused on strategic growth platforms in innovation-driven pharmaceuticals, high-quality and low-cost generics and leading self-medication OTC brands. In 2005, the Group's businesses achieved net sales of USD 32.2 billion and net income of USD 6.1 billion. Approximately USD 4.8 billion was invested in R&D. Headquartered in Basel, Switzerland, Novartis Group companies employ approximately 91,000 people and operate in over 140 countries around the world. For more information, please visit <http://www.novartis.com>.

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