



## Tekmira Partner Alnylam Presents Data on Programs Using Tekmira's SNALP Technology at Keystone Meeting

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**Vancouver, BC** —Tekmira Pharmaceuticals Corporation (TSX: TKM) announced today that one of the company's collaborators, Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY), has presented data generated with Tekmira scientists from multiple programs that incorporate Tekmira's SNALP technology at the "Therapeutic Modulation of RNA Using Oligonucleotides" Keystone Symposium held February 8-13, 2009 in Lake Louise, Alberta.

Presentations included data from Alnylam's ALN-VSP liver cancer, TTR amyloidosis, and Ebola programs, all of which incorporate Tekmira's SNALP technology.

Dr. Mark J. Murray, Tekmira's President and CEO, said, "These presentations offer additional evidence of the scientific progress we have made with our collaborators at Alnylam and the potential broad application of Tekmira's SNALP technology. These advancements augment our own internal product development efforts and highlight the opportunity for multiple RNAi products based on our fundamental technology."

The most advanced collaborator product incorporating Tekmira's SNALP technology is Alnylam's ALN-VSP, being developed as a treatment for liver cancers and other cancers with liver involvement. Alnylam's ALN-VSP Investigational New Drug (IND) application recently received clearance from the U.S. Food and Drug Association (FDA) and Alnylam intends to begin enrolling patients in a Phase 1 clinical trial in the first half of 2009.

Tekmira's lead internal product candidate is ApoB SNALP for which Tekmira intends to file an IND application and initiate a Phase 1 human clinical trial in the first half of 2009 to evaluate ApoB SNALP as a treatment for severe high cholesterol.

### Alnylam Keystone Symposium presentations

#### *Liver Cancer Presentation*

Alnylam is developing a systemically delivered RNAi therapeutic, ALN-VSP, for the treatment of liver cancers, including hepatocellular carcinoma and other solid tumors with liver involvement. ALN-VSP comprises two siRNAs formulated in a lipid nanoparticle in collaboration with Tekmira. ALN-VSP is designed to target two genes critical for the growth and development of cancer cells: kinesin spindle protein, or KSP, required for tumor proliferation; and vascular endothelial growth factor, or VEGF, required for growth of tumor blood vessels. In a poster titled "Advancement to the Clinic of ALN-VSP, an RNAi Therapeutic for Solid Tumors," Alnylam scientists presented new in vivo data from its ALN-VSP program.

In an orthotopic liver tumor model, pre-clinical data with ALN-VSP demonstrated the following:

- robust anti-tumor efficacy, including the inhibition of tumor growth as measured by serum levels of alpha-fetoprotein (AFP);
- proof of an RNAi mechanism of action toward both KSP and VEGF mRNAs, as determined by 5'RACE assays;
- statistically significant improvement in median survival for ALN-VSP-treated animals as compared to controls;
- statistically significant increase in survival of ALN-VSP treated animals compared to treatment with sorafenib (Nexavar®), an approved drug for the treatment of hepatocellular carcinoma; and,
- evidence for an even greater increase in survival benefit in animals treated with both ALN-VSP and sorafenib, suggesting that a combination of both treatments could provide an improved effect on overall survival.

#### *TTR Amyloidosis Presentation*

Alnylam is developing ALN-TTR, a systemically delivered RNAi therapeutic for the treatment of TTR amyloidosis, comprised of an siRNA targeting the TTR gene and formulated in lipid nanoparticles in collaboration with Tekmira. In a poster titled "Development of an RNAi Therapeutic Targeting Transthyretin for the Treatment of Familial Amyloidotic Polyneuropathy," Alnylam scientists presented in vivo data demonstrating the potential therapeutic benefit of ALN-TTR.

These data, which were previously presented in November 2008 at the Cambridge Healthtech Institute's Drug Formulation conference, showed that potent RNAi therapeutics targeting TTR significantly reduced the levels of target mRNA in the liver and TTR protein levels in circulation. Specifically, data from these studies demonstrated dose-dependent reductions in liver TTR mRNA levels by approximately 80% in non-human primates.

ALN-TTR is a potential Alnylam IND candidate for 2009.

#### *Alnylam BioDefense/Ebola Presentation*

Alnylam is developing an RNAi therapeutic directed against the Ebola virus, which can cause a severe, usually fatal infection, and poses a potential biological safety risk and bioterrorism threat. In a poster titled "RNAi Therapeutics for the Treatment of Ebola Virus Infection," pre-clinical studies in collaboration with scientists from Tekmira were presented.

Pre-clinical data showed the following:

- siRNAs targeting every viral gene were tested in vitro and in vivo for anti-viral activity leading to the identification of VP35 as the most potent anti-viral RNAi therapeutic target;

- a greater than 95% decrease in viral titer was seen when the VP35 siRNA was administered to mice infected with Ebola; and,
- the VP35 siRNA, as compared with a control non-specific siRNA, was able to protect both mice and guinea pigs from lethal Ebola infection.

#### **About RNAi and SNALP**

RNAi drugs have the potential to treat human diseases by "switching-off" disease causing genes. The technology, representing one of the most promising and rapidly advancing frontiers in biology and drug discovery, was awarded the 2006 Nobel Prize for Physiology or Medicine. RNAi drugs, such as siRNA, require delivery technology to be administered systemically. In preclinical studies, Tekmira's SNALP (stable nucleic acid-lipid particles) technology has been shown to be a safe and effective way to deliver RNAi drugs to disease sites. Tekmira believes it has a leading intellectual property position in the field of siRNA delivery.

#### **About Tekmira**

Tekmira Pharmaceuticals Corporation is a biopharmaceutical company focused on advancing novel RNAi therapeutics and providing its leading lipid nanoparticle delivery technology to pharmaceutical partners. Further information about Tekmira can be found at [www.tekmirapharm.com](http://www.tekmirapharm.com). Tekmira is based in Vancouver, B.C.

#### **Forward-Looking Statements and Information**

There are forward-looking statements and information contained herein that are not based on historical fact, including, without limitation, statements containing the words "believes," "may," "plans," "will," "estimate," "continue," "anticipates," "intends," "expects," and similar expressions, and the negative of such expressions. These statements are only predictions.

Forward-looking statements and information should be considered carefully. Undue reliance should not be placed on forward-looking statements and information as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. By their nature, forward-looking statements and information involve numerous assumptions, known and unknown risks and uncertainties, both general and specific, which contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements and information will not occur and may cause actual results or events to differ materially from those anticipated in such forward-looking statements and information.

There are also other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements and information. Such factors include, among others, the stage of development of Tekmira, lack of product revenues, additional capital requirements, the need to obtain regulatory approval to commence clinical trials, risks associated with the completion of clinical trials and obtaining regulatory approval to market Tekmira's products, the safety and efficacy of Tekmira's products, the ability to protect Tekmira's intellectual property and dependence on collaborative partners.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's management information circular dated May 1, 2008 available at [www.sedar.com](http://www.sedar.com). Tekmira disclaims any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements or information contained herein to reflect future results, events or developments, except as required by law.

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