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Tekmira Pharmaceuticals Presents ApoB SNALP and PLK1 SNALP Data at Leading Scientific Conference

ApoB SNALP Duration of Response Greater than 1 Month in Non-Human Primates

Vancouver, BC — Tekmira Pharmaceuticals Corporation (TSX: TKM) announced today that it will present data on the company's two lead product candidates, ApoB SNALP and PLK1 SNALP, at the 12th Annual Meeting of the American Society of Gene Therapy in San Diego, CA May 27-30, 2009. Tekmira will also present at an Educational Session that will address the importance of understanding immune stimulation in the development of small interfering RNA (siRNA) drugs, which was the basis for a recently published review article by Tekmira scientists.

ApoB SNALP Presentation

In a presentation entitled, "Development of an siRNA-Based Therapeutic for Hypercholesterolemia", Tekmira will present preclinical data supporting the advancement of ApoB SNALP into human clinical development. Highlights of the presentation include:

- Efficient delivery of ApoB SNALP to the liver results in a 90% reduction of ApoB mRNA and concomitant reduction in ApoB protein and low-density lipoprotein (LDL) or "bad" cholesterol in the bloodstream of rodents
- Administration of a single dose of ApoB SNALP results in the reduction of ApoB protein and LDL cholesterol that lasts longer than 1 month in non-human primates
- Repeat dosing of ApoB SNALP prevents the formation of atherosclerotic plaques in blood vessels of rodents fed a high fat diet compared to control animals
- Development of new SNALP formulations that result in a greater than 80% reduction of ApoB expression in rodents at doses of 0.1 mg/kg

Dr. Mark J. Murray, Tekmira's President and CEO, said "These recent ApoB SNALP preclinical data exemplify why we are excited about advancing ApoB SNALP into human clinical trials. We expect to initiate a Phase 1 clinical trial for ApoB SNALP before mid-year in patients with high LDL cholesterol. In addition, we continue to make significant advances in our SNALP platform which will support the long term development of multiple products in the RNAi therapeutics field."

PLK1 SNALP Presentation

In a presentation entitled, "Development of Systemic siRNA Based Cancer Therapeutics with a Confirmed RNAi-Mediated Mechanism of Action", Tekmira will present data supporting the development of PLK1 SNALP as a treatment for cancer. Highlights of the presentation include the rational design of an siRNA against polo-like kinase 1 (PLK1), a protein involved in tumor cell proliferation and an important oncology target. Inhibition of PLK1 prevents the tumor cell from completing cell division, resulting in cancer cell death. Tekmira scientists have evaluated numerous SNALP formulations directed at liver cancer and distal tumors outside the liver that result in significant inhibition of tumor growth and prolonged survival of treated animals. Importantly, PLK1 SNALP was well tolerated and the efficacy results were confirmed to be the result of silencing PLK1 via RNA interference.

Tekmira is advancing PLK1 SNALP towards human clinical trials and expects to file an Investigational New Drug (IND) application in 2010.

Immune Stimulation Educational Session Presentation and Publication

In an Educational Session titled, "Immunological Considerations for the Development of siRNA Based Drugs", Dr. Ian MacLachlan, Tekmira's Chief Scientific Officer, will highlight the importance of understanding the role of the immune system in the development of safe and effective siRNA drugs. The presentation will focus on the rational design of siRNA molecules to minimize the immune stimulation effects of the siRNA while preserving their RNAi activity. Non-specific immune stimulation can cause side effects and impact the ability to repeat dose RNAi drugs.

Tekmira has published numerous scientific articles on immune stimulation of nucleic acids including siRNA and employs a proprietary siRNA modification technology in the design of its RNAi product candidates. Tekmira scientists recently published a review article (Robbins et al, siRNA and Innate Immunity, Oligonucleotides, Volume 19, Number 2, 2009) on the immune stimulation of siRNA and approaches to overcome these challenges in the development of RNAi drugs.

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. 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.

With respect to the pre-clinical results discussed in this news release, there are circumstances and factors that may cause human clinical results to be materially different from any results that may be expressed or implied by information relating to the pre-clinical results. Such circumstances and factors include the following: clinical trials may not demonstrate safety and efficacy in humans or the drug candidates may fail in development or be delayed to a point where they do not become commercially viable.

The business of Tekmira is also subject to other risks and factors that may cause actual results, events or developments to be materially different from any future results, events or developments expressed or implied by any forward-looking statement 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 Annual Information Form dated March 31, 2009 available at 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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