

February 23, 2010

Tekmira Presents ApoB SNALP Data at AsiaTIDES RNAi Scientific Conference

-Second Generation ApoB SNALP to Enter Phase 1/2 Clinical Trial in Second Half of 2010-

Vancouver, BC — Tekmira Pharmaceuticals Corporation (TSX: TKM), a leader in RNA interference (RNAi) therapeutics, today presented data on its second generation ApoB SNALP clinical candidate that is expected to enter a Phase 1/2 human clinical trial in the second half of 2010.

Dr. Ian MacLachlan, Tekmira's Chief Scientific Officer, presented data at the AsiaTIDES Oligonucleotide and Peptide Research, Technology and Product Development Conference in Tokyo, Japan, highlighting Tekmira's advances in the development of a second generation ApoB siRNA and the latest advances in SNALP formulation development.

Tekmira reported that it has completed the evaluation of unique ApoB siRNA structures in selection of its second generation ApoB siRNA. The selection is based on experiments confirming the siRNA's ability to inhibit the expression of ApoB without stimulating the human immune system.

Dr. Mark J. Murray, Tekmira's President and CEO, said, "Building on the data and experience gathered in our recently completed ApoB SNALP Phase 1 clinical trial, we have rapidly identified a second generation ApoB siRNA which will enable us to resume clinical evaluation in the second half of 2010. The new ApoB SNALP will also use a second generation SNALP formulation, the result of improvements in SNALP formulation technology made since the first ApoB SNALP formulation was selected more than two years ago."

ApoB SNALP is being developed as a treatment for patients with high LDL cholesterol, or "bad" cholesterol, who are not well served by current therapy. Tekmira's therapeutic approach is to target ApoB, a protein synthesized in the liver that is essential to the assembly and secretion of very low density lipoprotein (VLDL), a precursor to LDL, both of which are involved in the transport and metabolism of cholesterol. ApoB SNALP consists of small interfering RNA (siRNA), designed to silence ApoB, encapsulated in a SNALP formulation. ApoB SNALP is delivered with high efficiency into the hepatocytes of the liver, the cells which produce ApoB, where the siRNA acts to silence the mRNA coding for ApoB protein resulting in a decrease in circulating VLDL and LDL.

About RNAi and SNALP

RNAi therapeutics have the potential to treat a broad number of human diseases by "silencing" disease causing genes. The discoverers of RNAi, a gene silencing mechanism used by all cells, were awarded the 2006 Nobel Prize for Physiology or Medicine. RNAi therapeutics, such as "siRNAs", require delivery technology to be effective systemically. Lipid nanoparticles (LNPs) is one of most widely used siRNA delivery approaches for systemic administration. Tekmira's SNALP (stable nucleic acid-lipid particles), is the leading class of LNPs being used in clinical development. SNALP technology encapsulates siRNAs with high efficiency in uniform lipid nanoparticles which have been shown to be safe and effective in delivering RNAi therapeutics to disease sites in numerous preclinical models. SNALP formulations are manufactured by a proprietary method which is robust, scalable and highly reproducible. SNALP-based products have been reviewed by multiple FDA divisions for use in clinical trials. SNALP formulations are comprised of several lipid components that can be adjusted to suit the specific application. The systemic RNAi product candidates being advanced by Tekmira, Alnylam and Roche employ SNALP technology.

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. Tekmira has been working in the field of nucleic acid delivery for over a decade and has broad intellectual property covering SNALP and LNPs. Further information about Tekmira can be found at <u>www.tekmirapharm.com</u>. 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.

With respect to statements on clinical programs, such statements are based upon Tekmira's assessment of its research and development capabilities and resources, the statements made by its development partners and its understanding of the regulatory approval process. However, FDA consent is required to commence a clinical trial and there is no guarantee that the FDA will approve the use of a new product candidate in a clinical trial.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's Annual Information Form dated March 31, 2009 available at <u>www.sedar.com</u>. 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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