April 14, 2009

Tekmira Pharmaceuticals Files IND for ApoB SNALP

Vancouver, BC — Tekmira Pharmaceuticals Corporation (TSX: TKM) announced today it has filed an Investigational New Drug (IND) application seeking approval from the United States Food and Drug Administration (FDA) to begin a Phase 1 human clinical trial to evaluate the Company's lead product candidate ApoB SNALP as a treatment for elevated low-density lipoprotein (LDL) cholesterol.

Dr. Mark J. Murray, Tekmira's President and CEO, said "The filing of the ApoB SNALP IND marks an important transition for Tekmira as our technology moves towards human clinical development and supports Tekmira's leadership position in the advancement of RNAi therapeutics."

The FDA has 30 days to review Tekmira's IND application and to request any additional information before allowing the clinical trial to proceed. Tekmira will provide guidance at the end of the FDA review period about the initiation and the details of the Phase 1 clinical trial, which is expected to begin before mid-year 2009.

Tekmira's therapeutic approach is to address the underlying cause by targeting 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 required for the transport and metabolism of cholesterol. ApoB SNALP has been shown in preclinical studies to reduce diet-induced high LDL cholesterol, or "bad" cholesterol, and return blood cholesterol levels to normal with a single treatment.

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 today's announcement of the filing of the ApoB SNALP IND to commence a Phase 1 human clinical trial, we must obtain the approval of the FDA before we can initiate the Phase 1 trial. If the FDA has questions regarding our IND application, we are required to answer those questions before we can commence the trial, which may delay the initiation of the trial. If we are unable to obtain the approval of the FDA to commence the requested trial, or the FDA requires changes to our trial design that are material, this may adversely affect our product development plans.

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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