



February 24, 2009

Tekmira Presents Data Demonstrating Further Increases in SNALP Potency

Vancouver, BC — Tekmira Pharmaceuticals Corporation (TSX: TKM) today presented data highlighting further improvements in the potency and tolerability of the company's SNALP technology that result in a wider therapeutic index for systemically delivered small interfering RNA (siRNA) drugs. Improvements in therapeutic index have the potential to broaden the therapeutic applications for Tekmira's SNALP technology in the RNA interference (RNAi) field.

Dr. Ian MacLachlan, Tekmira's Chief Scientific Officer, presented data at the Asia TIDES Oligonucleotide and Peptide® Technology and Product Development Conference in Tokyo, Japan, that demonstrated improvements in the therapeutic index of new SNALP formulations of 5-10 times over that of formulations currently in use. These improvements were generated by incorporating novel proprietary lipids in Tekmira's SNALP technology.

Importantly, these improvements were made with SNALP formulations designed for delivery of siRNA to targets both in and outside of the liver. Furthermore, the formulation improvements were achieved without inducing adaptive immune responses. Adaptive immune responses, such as the development of antibodies, have the potential to undermine the safety and effectiveness of drugs, such as RNAi therapeutics, that are designed for multiple rounds of administration.

In his talk entitled "TLR Mediated Immune Responses to siRNA Based Drugs" Dr. MacLachlan described the techniques developed by Tekmira to monitor this aspect of siRNA-based drug safety, a key component in their development.

Dr. Mark J. Murray, Tekmira's President and CEO, said "These new improvements have the potential to expand the opportunity of systemic RNAi drugs and supports Tekmira as a leader in the field. We expect our research efforts will continue to make these technology advances critical to the success of systemic RNAi therapeutics."

The Tokyo conference is the 20th TIDES Oligonucleotide and Peptide® Technology and Product Development Conference. TIDES is the only conference to focus on technology and product development, manufacturing and partnering in the fields of RNAi and other oligonucleotide and peptide-based therapeutics and diagnostics.

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 management information circular dated May 1, 2008 and 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.

Contact Information

Investors

Adam Peeler

The Equicom Group

Phone: 416-815-0700 x 225

Email: apeeler@equicomgroup.com

Ian Mortimer

Executive Vice President and Chief Financial Officer

Phone: 604-419-3200

Media

David Ryan

Longview Communications Inc.

Phone: 604-694-6031

Email: dryan@longviewcomms.ca