October 22, 2008

Tekmira Pharmaceuticals Announces Presentation of Data Using SNALP RNAi Delivery Technology

Vancouver, British Columbia — Tekmira Pharmaceuticals Corporation (TSX: TKM) announced today that studies conducted by Tekmira and Johnson & Johnson Pharmaceutical Research & Development, Division of Janssen Pharmaceutica, N.V. (J&JPRD), have shown that novel small interfering RNA (siRNA) molecules enabled by Tekmira's proprietary SNALP technology significantly reduce fat storage in the liver.

The data will be presented today at Cambridge Healthtech Institute's RNAi for Therapeutics Conference being held in Boston, MA.

J&JPRD will present data using siRNA enabled by SNALP to switch off genes that encode key enzymes, called diacylglycerol acyltransferases (DGAT), in triglyceride synthesis. These data demonstrate the capability of SNALP-enabled siRNA to reduce DGAT mRNA levels by greater than 90%, which results in a reduction in fat storage in the livers of animals fed a high-fat diet. The reduction lasted for up to two weeks after a single injection, and there was no sign of toxicity or inflammation in the livers of these animals after two or four weeks of treatment.

Dr. Mark J. Murray, Tekmira's President and CEO, said, "We are encouraged by the data demonstrating reduced liver fat storage. It continues to expand the therapeutic potential of RNAi and SNALP and suggests the targets evaluated may have the potential to treat metabolic diseases, such as diabetes and obesity."

Tekmira and its research collaborators are developing drugs based on RNA interference (RNAi), which has the potential to treat a wide range of human diseases by switching-off disease-causing genes. The RNAi-based drugs consist of therapeutic agents, siRNA, which are delivered in stable nucleic acid–lipid particles (SNALP), Tekmira's proprietary delivery technology.

About RNAi and SNALP
RNAi drugs have the potential to treat human diseases by "switching-off" disease causing genes. The discovery of RNAi, 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.

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. 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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