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Tekmira and the National Cancer Institute Publish Promising Data Demonstrating the Anti-Tumor Activity of a Novel Cancer Target

VANCOUVER, British Columbia, April 21, 2011 (GLOBE NEWSWIRE) -- Tekmira Pharmaceuticals Corporation (Nasdaq:TKMR) (TSX:TKM), a leading developer of RNA interference (RNAi) therapeutics, announced today that promising preclinical data from its collaboration with the National Cancer Institute (NCI) has been published in *Oncogene*, one of the world's leading cancer journals.

The article is entitled "Molecular targeting of CSN5 in human hepatocellular carcinoma: a mechanism of therapeutic response" and presents encouraging pre-clinical data related to the treatment of liver cancer using small interfering RNA (siRNA) enabled by Tekmira's lipid nanoparticle (LNP) delivery technology.

"We are pleased to see further exciting CSN5 anti-tumor data coming out of our ongoing collaboration with the National Cancer Institute. We believe that the NCI's expertise in identifying novel cancer targets is complemented by Tekmira's expertise in siRNA molecule design and LNP delivery," said Dr. Mark J. Murray, Tekmira's President and CEO.

Scientists at the NCI have worked in collaboration with Tekmira to develop siRNA to silence the CSN5 gene, which could represent a novel therapeutic target to treat hepatocellular carcinoma (HCC) and other cancers. This latest data indicates that siRNA-mediated CSN5 knock-down inhibits cell-cycle progression and greatly increases the rate of apoptosis (programmed cell death) in HCC cells. Some key highlights from the article include:

- Gene expression data indicating that CSN5 has a pivotal role in HCC pathogenesis and microarray analysis revealing CSN5 may be one of the early markers of malignant conversion of HCC.
- Optimized siRNA against CSN5 resulted in 80% inhibition of tumor cell growth *in vitro*.
- Systemic delivery of the siRNA using Tekmira's LNP delivery technology resulted in a significant reduction in tumor growth in a model of human liver cancer.

"We look forward to continuing our collaborative work with the NCI to identify novel cancer targets and demonstrate anti-tumor activity by silencing these genes through RNA interference with the goal of advancing new oncology product candidates," added Dr. Murray.

CSN5 over-expression has been observed in a number of cancers, including breast, thyroid, skin, ovarian, lung and pancreatic cancers. HCC is the third most lethal cancer, causing an estimated 600,000 deaths annually due in part to a lack of effective treatment options.

Tekmira continues to advance its pipeline of proprietary product candidates, including Tekmira's lead oncology product, TKM-PLK1, which is currently in a Phase 1 human clinical trial conducted at three medical centers in the United States.

About RNAi and Tekmira's LNP Technology

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. LNP technology is one of the most widely used siRNA delivery approaches for systemic administration. Tekmira's LNP technology (formerly referred to as stable nucleic acid-lipid particles or SNALP) encapsulates siRNAs with high efficiency in uniform lipid nanoparticles which are effective in delivering RNAi therapeutics to disease sites in numerous preclinical models. Tekmira's LNP formulations are manufactured by a proprietary method which is robust, scalable and highly reproducible and LNP-based products have been reviewed by multiple FDA divisions for use in clinical trials. LNP formulations comprise several lipid components that can be adjusted to suit the specific application.

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 LNPs. Further information about Tekmira can be found at www.tekmirapharm.com. Tekmira is based in Vancouver, B.C.

The Tekmira Pharmaceuticals logo is available at <http://www.globenewswire.com/newsroom/prs/?pkgid=8319>

Forward-looking Statements and Information

This press release contains "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws (collectively, "forward-looking statements"). Forward-looking statements are generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "budgets," "could," "estimates," "expects," "forecasts," "projects" and similar expressions, and the negative of such expressions. Forward-looking statements in this news release include statements about pre-clinical data from Tekmira's collaboration with NCI related to the treatment of liver cancer using siRNA enabled by Tekmira's LNP delivery technology published in the *Oncogene* journal; the potential to silence the CSN5 gene and possibility of a novel therapeutic target to treat HCC and other cancers; the ongoing collaborative work with the NCI to identify novel cancer targets and demonstrating anti-tumor activity by silencing genes through RNA interference; Tekmira's strategy, future operations, clinical trials, prospects and plans of management; Tekmira's RNAi product development programs; the results of LNP delivery of siRNA targeting CSN5; and any future results from Tekmira's collaboration with the United States National Cancer Institute.

With respect to the forward-looking statements contained in this news release, Tekmira has made numerous assumptions regarding, among other things: LNP's status as a leading RNAi delivery technology; the effectiveness of Tekmira's TKM-PLK1 product candidate as a treatment for cancer; and the effectiveness of Tekmira's LNP delivery technology. While Tekmira considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Additionally, there are known and unknown risk factors which could cause Tekmira's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, among others: the possibility that siRNA enabled by Tekmira's LNP delivery technology is ineffective in the treatment of liver cancer or other cancers; the possibility that Tekmira and the NCI's collaboration fail to identify novel cancer targets or demonstrate anti-tumor activity by silencing genes through RNA interference; the possibility that other organizations have made advancements in RNAi delivery technology that Tekmira is not aware of; Tekmira's development programs, including LNP delivery technology and its collaboration with the United States National Cancer Institute, will not result in expected results on a timely basis, or at all.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's Annual Information Form dated March 30, 2011 and available at www.sedar.com. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

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