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Tekmira Announces Additional Clinical Trial of TKM-PLK1 with the U.S. National Cancer Institute

FDA Approves Clinical Protocol for Additional Phase 1 Study of TKM-PLK1

VANCOUVER, British Columbia, Aug. 9, 2011 (GLOBE NEWSWIRE) -- Tekmira Pharmaceuticals Corporation (Nasdaq:TKMR) (TSX:TKM), a leading developer of RNA interference (RNAi) therapeutics, along with its collaborators at the United States National Cancer Institute (NCI), announced today that they have received approval from the United States Food and Drug Administration (FDA) to proceed with a new Phase 1 clinical trial for Tekmira's lead oncology product, TKM-PLK1. This trial, run in parallel with the ongoing Phase 1 trial of TKM-PLK1, provides Tekmira with an early opportunity to validate the drug's mechanism of action.

"Patients in this new study, who will have either primary liver cancer or liver metastases, will receive TKM-PLK1 delivered directly into the liver via Hepatic Artery Infusion (HAI). The trial design will allow us to measure tumor delivery, polo-like kinase 1 (PLK1) messenger RNA knockdown, and RNA interference (RNAi) activity in tumor biopsies from all of the patients treated," said Dr. Mark J. Murray, Tekmira's President and CEO.

"This NCI clinical trial will run in parallel with our multi-center TKM-PLK1 solid tumor Phase 1 trial, currently underway at three centers in the United States. Working together on this clinical trial with our collaborators at the NCI will allow us to develop an even more robust data package to inform subsequent TKM-PLK1 development. We expect to have interim TKM-PLK1 clinical data before the end of 2011," added Dr. Murray.

The NCI trial is a Phase 1 multiple-dose, dose escalation study testing TKM-PLK1 in patients with unresectable colorectal, pancreatic, gastric, breast, ovarian and esophageal cancers with liver metastases, or primary liver cancers. These patients represent a significant unmet medical need as they are not well served by currently approved treatments. The primary objectives of the trial include evaluation of the feasibility of administering TKM-PLK1 via HAI and to characterize the pharmacokinetics and pharmacodynamics of TKM-PLK1. Pharmacodynamic measurements will examine the effect of the drug on the patient's tumors, specifically aiming to confirm PLK1 knockdown and RNAi activity. Typically reserved for later stage trials, pharmacodynamic measurements are facilitated in this Phase 1 trial in part through the unique capabilities of the NCI Surgery Branch. Secondary objectives of the trial include establishing maximum tolerated dose and to evaluate response rate.

About the NCI

The NCI is one of the United States National Institutes of Health, the primary medical research agency in the U.S. The TKM-PLK1 trial will involve investigators at the NCI's Center for Cancer Research (CCR) on the main NIH campus in Bethesda, Maryland. The CCR is home to more than 250 scientists and clinicians working in intramural research at the NCI. CCR's investigators include some of the worlds most experienced basic, clinical, and translational scientists who work together to advance our knowledge of cancer and develop new therapies.

About TKM-PLK1

TKM-PLK1 targets polo-like kinase 1, or PLK1, a cell cycle protein involved in tumor cell proliferation and a validated oncology target. Cancer patients whose tumors express high levels of PLK1 have a relatively poor prognosis. Inhibition of PLK1 prevents tumor cells from completing cell division, resulting in cell cycle arrest and cancer cell death.

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 Tekmira's strategy, future operations, clinical trials, prospects and plans of management; Tekmira's RNAi product development programs; the effects of TKM-PLK1 as a treatment of cancer; the efficacy of the Hepatic Artery Infusion (HAI) protocol for directly measuring PLK1 knockdown and RNAi activity; any future results from Tekmira's collaboration with the United States National Cancer Institute; and the timing for publication of interim data from the TKM-PLK1 Phase 1 clinical trials.

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 LNP delivery technology; the effectiveness of Tekmira's RNAi product development programs; the effectiveness of Tekmira's TKM-PLK1 product candidate as a treatment for cancer; the effectiveness of the Hepatic Artery Infusion (HAI) protocol for directly measuring PLK1 knockdown and RNAi activity; and the extent of Tekmira's research, development and manufacturing capabilities and resources. 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 other organizations have made advancements in RNAi delivery technology that Tekmira is not aware of and Tekmira's development programs, including 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.secar.com or at www.sec.gov/edgar. 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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