Tekmira Pharmaceuticals Provides Corporate Update

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VANCOUVER, BC —Tekmira Pharmaceuticals Corporation (TSX: TKM), a leader in RNA interference (RNAi) therapeutics, today provided an update on its internal product candidates and development plans.

Highlights of the Company's product review and upcoming corporate milestones include:

- Based on the review of non-clinical data for TKM-ApoB, Tekmira has decided to delay the initiation of the next TKM-ApoB clinical trial. Tekmira had originally planned to initiate the Phase 1-2 clinical trial for TKM-ApoB by the end of this year. In non-clinical studies, the performance characteristics of the specific lipid nanoparticle (LNP) formulation used in the current TKM-ApoB product candidate have not met the Company's expectations for the intended application. Tekmira tailors LNP formulations for each intended application. This delay has no impact on any of the Company's other programs or the programs of Tekmira's collaboration partners. Tekmira has continued to make significant advances in LNP formulation development and there are several alternative LNP formulations with improved characteristics that are currently being evaluated for TKM-ApoB development. TKM-ApoB is being developed as a treatment for patients with high LDL cholesterol who are not well served by current therapy.

- Tekmira is evaluating opportunities to expand the development of TKM-PLK1, including initiating a clinical trial in collaboration with the United States National Cancer Institute (NCI). The NCI trial will aim to demonstrate PLK1 knockdown and RNAi activity in specific tumor types. The Investigational New Drug (IND) application for TKM-PLK1 was recently cleared by the U.S. Food and Drug Administration (FDA) for initiation of a Phase 1 clinical trial. Tekmira plans to initiate the Phase 1 clinical trial in the fourth quarter of 2010. An additional trial involving the NCI will provide an opportunity to evaluate TKM-PLK1 in a clinical trial designed to rapidly provide clinical data in an oncology application with Tekmira's LNP technology and confirm PLK1 as an important oncology target.

- Tekmira has formally initiated the development of TKM-Ebola under the $140 million contract awarded to Tekmira by the U.S. Government's Transformational Medical Technologies (TMT) Program. Earlier this year, Tekmira published data in The Lancet demonstrating the ability of TKM-Ebola to protect non-human primates from Ebola virus, a highly contagious and lethal human infectious disease. The TMT contract will support the TKM-Ebola program through clinical development and FDA approval. Tekmira anticipates filing an IND for TKM-Ebola in the second half of 2011 to initiate a Phase 1 clinical trial. TKM-Ebola will be developed under specific regulatory guidelines to advance therapeutics that cannot meet the requirements for traditional approval because human efficacy studies are not feasible. Tekmira believes this could significantly accelerate the approval of TKM-Ebola and is dedicating additional resources to advance this program.

Dr. Mark J. Murray, Tekmira's President and CEO, said, "We are looking forward to advancing TKM-PLK1 into human clinical trials on schedule later this year, and we are excited by the opportunity that exists to expand the program with the NCI. In addition, our TKM-Ebola program will add to our product pipeline and the TMT contract will support continued investment in our leading LNP delivery technology."

"We are not satisfied with the performance of our current TKM-ApoB LNP formulation for its intended use and we are going to focus on selecting an alternative formulation and availing ourselves of our existing improvements in formulation technology before resuming clinical development. In addition to our own internal product candidates, our partners continue to make excellent progress using our LNP technology for a variety of applications and, given our leadership position in the field, we believe we are very well positioned to continue expanding our partnerships and research collaborations," said Dr. Murray.

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

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 the plans of management; RNAi (ribonucleic acid interference) product development programs; the effects of Tekmira's products on the treatment of elevated low-density lipoprotein (LDL) cholesterol, cancer and infectious disease; and Tekmira's expectations with respect to existing and future agreements

with third parties.

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 products as a treatment for high LDL cholesterol, cancer and infectious disease; the developmental milestones and approvals required to trigger funding for TKM-Ebola from the Transformational Medical Technologies program; results in non-human primates are indicative of the potential effect in humans; Tekmira's research and development capabilities and resources; FDA approval with respect to commencing clinical trials; the timing and obtaining of regulatory approvals for Tekmira's products; and the time required to complete research and product development activities. 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; the FDA will not approve the commencement of Tekmira's planned clinical trials or approve the use of Tekmira's products and generally, difficulties or delays in the progress, timing and results of clinical trials and studies; anticipated payments under contracts with Tekmira's collaborative partners including the U.S. Government will not be received by Tekmira on a timely basis, or at all, or in the quantum expected by Tekmira; pre-clinical trials may not be completed, or clinical trials started, when anticipated or at all; pre-clinical and clinical trials may be more costly or take longer to complete than anticipated; pre-clinical or clinical trials may not generate results that warrant future development of the tested drug candidate.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's Annual Information Form dated March 31, 2010 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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