

August 12, 2010

Tekmira Pharmaceuticals Announces Second Quarter 2010 Financial Results

Vancouver, BC — Tekmira Pharmaceuticals Corporation (TSX: TKM), a leader in RNA interference (RNAi) therapeutics, today announced its financial and operational results for the second quarter ended June 30, 2010.

Dr. Mark J. Murray, Tekmira's President and CEO, said, "During the second quarter of 2010, we continued to strengthen our position as a global leader in the field of RNAi drug development by moving our own internal product candidates forward and supporting our collaboration partners who rely on Tekmira's leading lipid nanoparticle delivery technology to advance their product candidates."

"Our lead product candidate, TKM-ApoB, will continue clinical evaluation later this year and our second product candidate, TKM-PLK1, for which we recently filed an IND, will begin a Phase 1 human clinical trial before the end of 2010. Our partner, Alnylam Pharmaceuticals, initiated a Phase 1 clinical trial of ALN-TTR01 and presented Phase 1 data on ALN-VSP, both of which utilize Tekmira's lipid nanoparticle delivery technology. As well, subsequent to the end of the quarter, we were awarded a U.S. Government contract worth up to U.S. \$140 million to develop our third product candidate, TKM-Ebola."

"We are very pleased with our progress and that of our partners in the second quarter. We are now developing three of our own product candidates in different therapeutic areas, which demonstrates the breadth of our RNAi technology, and we enter the second half of 2010 with significant positive momentum," said Dr. Murray.

Key achievements in the second quarter:

- Signed a U.S. \$3.0 million multiyear, target validation agreement with global pharmaceutical company Bristol-Myers Squibb. As part of the agreement, Tekmira has the opportunity to use the data generated by Bristol-Myers Squibb to identify its own proprietary RNAi therapeutic products;
- Published data in The Lancet demonstrating the ability of an RNAi therapeutic, TKM-Ebola, to protect nonhuman
 primates from Ebola virus, a highly contagious and lethal human infectious disease. Subsequent to the end of the
 quarter, Tekmira was awarded a U.S. Government contract through the Transformational Medical Technologies (TMT)
 Program. The contract, worth up to U.S. \$140 million, will support the development of TKM-Ebola through clinical
 development and approval with the U.S. Food and Drug Administration (FDA). TKM-Ebola is Tekmira's third product in
 development.
- Subsequent to the end of the quarter, Tekmira filed an Investigational New Drug (IND) application with the FDA to initiate
 a Phase 1 human clinical trial of TKM-PLK1 as a treatment for solid tumor cancers. PLK1 (polo-like kinase 1) is a
 validated oncology target involved in tumor cell proliferation and inhibition of PLK1 prevents the tumor cell from
 completing cell division.
- Tekmira collaboration partner Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY) presented preliminary data from an
 ongoing Phase 1 human clinical trial of ALN-VSP, which showed that study results from 19 patients in the first four dose
 cohorts demonstrated that the drug candidate is well tolerated in most patients. Results from pharmacodynamic
 measurements provided preliminary evidence of clinical activity. ALN-VSP, which is being developed as a potential
 treatment for advanced solid tumors with liver involvement, utilizes Tekmira's leading lipid nanoparticle (LNP or SNALP)
 delivery technology;
- Subsequent to quarter end, Alnylam initiated dosing in a Phase 1 human clinical trial of its product candidate ALN-TTR01. The study is designed to evaluate the safety and tolerability of ALN-TTR01 in patients with transthyretin (TTR)-mediated amyloidosis (ATTR), a disease that results in damage to the peripheral nerves and heart. ALN-TTR01 is a systemic RNAi therapeutic that uses Tekmira's LNP delivery technology;
- Continued to support Roche as they develop an RNAi product candidate using Tekmira's LNP delivery technology.
 Roche has provided guidance to Tekmira that the IND filing of the product candidate will be delayed and will not be filed before the end of 2010;

- Continued to support collaborations with Pfizer and Takeda Pharmaceutical Company Limited as Pfizer and Takeda
 continue to evaluate therapeutic candidates employing Tekmira's LNP technology. In addition, Tekmira initiated new
 collaborations during the quarter to evaluate active targeting of Tekmira's LNP technology and to evaluate different
 classes of nucleic acid payload technologies:
- Concluded the second quarter with \$18.2 million in cash through prudent management of expenses and continued recurring revenue from Tekmira's product development partners. Tekmira expects that the current cash on hand, the cash received from the recent expansion of Tekmira's agreement with Bristol-Myers Squibb and contractually committed revenue from Tekmira's partners, including the U.S. Government's TMT program, will enable execution of its business strategy into 2012.

Financial Results

For Q2 2010 Tekmira's net loss was \$4.2 million as compared to a net loss of \$2.3 million for Q2 2009.

The primary reasons for the increase in net loss are a reduction in revenues and increased spending on the TKM-ApoB and TKM-PLK1 programs. Tekmira's revenues fluctuate particularly due to the variability in demand for its manufacturing services and timing of milestone receipts. In Q2 2010 the Company was completing toxicology studies in preparation for clinical development of its TKM-ApoB and TKM-PLK1 programs.

Revenue

Revenue from research and development collaborations, licensing fees and milestone payments was \$2.3 million for Q2 2010 as compared to \$3.8 million for Q2 2009.

Alnylam collaboration revenue in Q2 2010 was \$1.4 million as compared to \$2.2 million for Q2 2009. Tekmira's research agreement with Alnylam expired in August 2009. Also, manufacturing revenue was lower in Q2 2010 as compared to Q2 2009 as Alnylam requested fewer batches of drugs. Manufacturing activity levels fluctuate from period to period and between collaborations and internal projects. The Q2 2010 Alnylam revenue is earned under a manufacturing agreement that quarantees a minimum payment of \$11.2 million over the three years from 2009 to 2011.

Q2 2009 revenues also included a \$0.6 million milestone from Alnylam related to the initiation of a clinical trial. Tekmira didn't record any milestone revenue in Q2 2010 but does expect to record a milestone of US\$0.5 million in Q3 2010 as Alnylam has now initiated a trial for its product candidate ALN-TTR01.

Roche revenue was \$0.9 million in Q2 2010 as compared to \$1.0 million in Q2 2009. Tekmira completed a research contract with Roche in Q2 2009 and then expanded its Roche collaboration with the signing of a Product Development Agreement in May 2009. Under the Product Development Agreement, Roche is currently developing one product using Tekmira's lipid nanoparticle technology.

Expenses - Research, development and collaborations

Research, development and collaborations expenses increased to \$4.8 million for Q2 2010 as compared to \$4.4 million for Q2 2009. The primary reason for the increase is the cost of conducting toxicology studies in preparation for clinical development of the Company's TKM-ApoB and TKM-PLK1 programs.

Research, development and collaborations compensation expenses were higher in Q2 2009 as compared to Q2 2010 as a bonus pay-out was made in Q2 2009 following the successful filing of a TKM-ApoB IND application and signing the Product Development Agreement with Roche.

In the Company's 2009 Annual Management's Discussion and Analysis Tekmira guided that research, development and collaborations expenses were expected to increase in 2010 as compared to 2009 as TKM-ApoB and TKM-PLK1 are progressed into the clinic. As a result of the recently awarded U.S. Government contract to develop TKM-Ebola the Company is now guiding that it expects to incur further unbudgeted research, development and collaborations expenses. These further expenses will, however, be more than offset by revenues recognized from the contract as costs will be reimbursed and Tekmira will charge for program overheads and for a profit margin.

Expenses - General and administrative

General and administrative expenses were \$1.1 million for Q2 2010 as compared to \$1.1 million for Q2 2009. There are two major offsetting costs: in Q2 2009 Tekmira paid out discretionary bonuses to its staff and in Q2 2010 the Company incurred fees related to its NASDAQ listing application.

In the Company's 2009 Annual Management's Discussion and Analysis Tekmira guided that general and administrative expenses should decrease in 2010 as compared to 2009. As Tekmira's NASDAQ listing progresses, the Company expects to incur further fees that were not budgeted and this will likely result in an increase in total general and administrative expenses in 2010 as compared to 2009.

Conference Call Information

Management of Tekmira will hold a conference call and webcast to discuss second quarter 2010 operating results and to provide a corporate update on Thursday, August 12, 2010 at 9:00 am Pacific Time (12:00 noon Eastern Time). To participate in the conference call, please dial 416-340-2218 or 1-866-226-1793. The call will be available for replay until August 26, 2010 by calling 416-695-5800 or 1-800-408-3053 and entering the code 6633600. The live or archived webcast can also be accessed through the Company's website at www.tekmirapharm.com.

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. Lipid nanoparticle (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 LNP technology. 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; estimates of the number of clinical development programs to be undertaken by Tekmira and its product development partners; selection of additional product candidates; timing of release of clinical data; the quantum and timing of potential funding; use of lipid nanoparticle (LNP) technology by Tekmira's licensees (we have previously referred to our LNP technology as SNALP for Stable Nucleic Acid Lipid Particles); the effects of Tekmira's products on the treatment of elevated low-density lipoprotein (LDL) cholesterol, cancer and infectious disease; Tekmira's expectations with respect to existing and future agreements with third parties; and estimates of the length of time Tekmira's business will be funded by its anticipated financial resources.

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; FDA approval of Tekmira's products; the timing and obtaining of regulatory approvals for Tekmira's products; the timing and results of clinical data releases and use of LNP technology by Tekmira's development partners and licensees; the time required to complete research and product development activities; the timing and quantum of payments to be received under contracts with Tekmira's collaborative partners including the U.S. Government; the sufficiency of budgeted capital expenditures in carrying out planned activities; Tekmira's ability to protect its intellectual property rights and not to infringe on the intellectual property rights of others; the ability to succeed at establishing a successful commercialization program for any of Tekmira's products; and the availability and cost of labour and services. 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; the FDA may determine that the design and planned analysis of Tekmira's clinical trials do not adequately address the trial objectives in support of Tekmira's regulatory submissions; future operating results are uncertain and likely to fluctuate; Tekmira may not be able to develop and obtain regulatory approval for its products; competition from other pharmaceutical or biotechnology companies; Tekmira's ability to raise additional financing required to fund further research and development, clinical studies, and obtain regulatory approvals, on commercially acceptable terms or at all; economic and capital market conditions; Tekmira's ability to obtain and protect

intellectual property rights, and operate without infringing on the intellectual property rights of others; Tekmira's research and development capabilities and resources will not meet current or expected demand; Tekmira's development partners and licensees conducting clinical trial and development programs will not result in expected results on a timely basis, or at all; 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; funding from research and product development partners may not be provided when required under agreements with those partners; Tekmira may become subject to product liability or other legal claims for which the Company has made no accrual in its financial statements; Tekmira has not sufficiently budgeted for capital expenditures necessary to carry out planned activities.

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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