November 12, 2009

Tekmira Pharmaceuticals Corporation Announces Third Quarter 2009 Operating Results and Provides Corporate Update

VANCOUVER, BC — Tekmira Pharmaceuticals Corporation (TSX: TKM), a leading developer of RNA interference (RNAi) therapeutics and proprietary delivery technology, announced today its operating results for the third quarter of 2009.

Dr. Mark J. Murray, Tekmira's President and CEO, said, "We made significant progress on all aspects of our business during the third quarter of 2009, including the advancement of our two lead product candidates. We continued to earn significant revenue from our pharmaceutical partners who are advancing products enabled by our leading RNAi delivery technology while we remain focused on conservatively managing our expenses. Consequently, we have extended our cash resources into the second half of 2011."

"We are on track to release data from our ongoing Phase 1 human clinical trial for our lead product ApoB SNALP in the first quarter of 2010 and we expect to advance our second product candidate PLK1 SNALP into human clinical trials in the second half of 2010. Additionally, both Alnylam Pharmaceuticals and Roche are advancing products using our SNALP delivery technology," said Dr. Murray.

Key achievements during the third quarter of 2009 include:

- Continuation of patient enrolment in the Phase 1 human clinical trial for ApoB SNALP, Tekmira's lead RNAi therapeutic product candidate. ApoB SNALP is being developed as a treatment for patients with high low-density lipoprotein (LDL) cholesterol, or "bad" cholesterol, who are not well served by current therapy. ApoB SNALP is designed to reduce the production of apolipoprotein B (ApoB), a protein produced in the liver that plays a central role in cholesterol transport and metabolism. The Phase 1 clinical trial will evaluate the safety, tolerability and pharmacokinetics of escalating single doses of ApoB SNALP in approximately 30 patients with high levels of LDL cholesterol. The trial may also provide preliminary data on the ability of ApoB SNALP to lower serum LDL cholesterol levels. Patients whose LDL cholesterol is reduced by greater than 15% from baseline will be followed until their LDL cholesterol levels return to baseline. Tekmira expects to complete the trial and release data in the first quarter of 2010.

- Progress on the company's objective to file an investigational new drug (IND) application for PLK1 SNALP in 2010 and develop the product candidate as a treatment for cancer. Tekmira scientists have developed SNALP formulations directed at liver cancer and distal tumors outside the liver that result in significant inhibition of tumor growth and prolonged survival of treated animals. Importantly, PLK1 SNALP was well tolerated and the efficacy results were confirmed to be the result of silencing PLK1 via RNA interference.

- Continued execution of the company's partnership with Alnylam Pharmaceuticals, Inc. (NASDAQ: ALNY). The Alnylam collaboration includes milestone payments to Tekmira of US$16 million on each RNAi therapeutic advanced by Alnylam (or its partners) that utilizes the company's technology, as well as royalties on product sales, and a minimum of $11.2 million in payments to Tekmira for manufacturing services over the next three years. The first product candidate developed by Alnylam under this agreement, ALN-VSP, is now in a Phase 1 human clinical trial and a second product candidate, ALN-TTR, will be entering human clinical trials in early 2010.

- Continued execution of the company's product development partnership with global healthcare company Roche (SWX: ROG.VX; RO.S, OTCQX: RHHBY). The Roche partnership includes payments to Tekmira of up to US$18.4 million to support preclinical development of Roche's first two RNAi products that use Tekmira's SNALP technology and milestone payments of up to US$32 million, plus royalties on product sales. Roche expects to file an IND application for their first SNALP product in 2010.

- Concluding the third quarter with $26.9 million in cash through prudent management of expenses and strong recurring revenue from Tekmira's product development partners. Tekmira expects the current cash on hand will enable execution of its business strategy into the second half 2011 without the need for additional financing.

FINANCIAL RESULTS

For the nine months ended September 30, 2009, the company's net loss was $7.2 million ($0.14 per common share) as compared to a net loss of $11.3 million ($0.26 per common share) for the comparative period of 2008. For the three months ended September 30, 2009, Tekmira's net loss was $2.8 million ($0.05 per common share) as compared to a net loss of $6.0 million ($0.12 per common share) for the third quarter of 2008.

There are a number of factors contributing to changes in the company's results including some unusual 2008 expenses linked to the acquisition of Protiva and an impairment loss on goodwill.

Revenue
Revenue from research and development collaborations, licensing fees and milestone payments was $3.3 million for Q3 2009 as compared to $4.2 million for Q3 2008 and was $9.9 million for the first nine months of 2009 as compared to $8.6 million for the first nine months of 2008. Looking at collaborations revenue, the expiration of the company's research collaboration with Alnylam in the current quarter has been offset by expansion of manufacturing services provided to Alnylam and the expansion of Tekmira's collaboration with Roche. Licensing fees and milestone payments revenue is lower in 2009 as compared to 2008 as up-front payments from Alnylam were fully amortized into revenue by the end of 2008 and the only 2009 receipt was an Alnylam milestone payment of $0.6 million.

Alnylam revenue
Research and development collaborations revenue from Alnylam was $2.2 million for Q3 2009 as compared to $2.7 million for Q3 2008 and was $6.8 million for the first nine months of 2009 as compared to $4.5 million for the first nine months of 2008. Under an agreement with Alnylam they were required to make collaborative research payments at a minimum rate of US$2.0 million per annum for the provision of Tekmira research staff. This agreement expired on August 13, 2009 and the company no longer receives research funding from Alnylam. The company is, however, continuing to make SNALP research batches for Alnylam under a Manufacturing Agreement.

Under the Alnylam Manufacturing Agreement the company is the exclusive manufacturer of any products required by Alnylam that utilize Tekmira technology through to the end of Phase 2 clinical trials. Under the Alnylam Manufacturing Agreement there is a contractual minimum payment for the provision of staff in each of the three years from 2009 to 2011 and Alnylam is reimbursing Tekmira for any external costs incurred. Revenue from external costs related to the Alnylam Manufacturing Agreement is being recorded in the period that Alnylam is invoiced for those costs except where Tekmira bears the risk of batch failure in which case revenue is recognized only once Alnylam accepts the batch. The total payment for the provision of staff from 2009 to 2011 is a minimum of $11.2 million. The company is recognizing revenue for the provision of staff under the Alnylam Manufacturing Agreement based on actual staff hours provided and an estimate of total staff hours to be provided in the year. In the third quarter of 2009 the estimate of total hours to be provided in the year was reduced to below the minimum that Alnylam must pay for which resulted in additional revenue being recognized in the third quarter.

Tekmira is eligible to receive up to US$16.0 million in milestones for each RNAi therapeutic advanced by Alnylam or its partners that utilizes Tekmira's intellectual property, and royalties on product sales. On April 3, 2009 Alnylam announced that they had initiated a Phase 1 human clinical trial for ALN-VSP, a product candidate that utilizes Tekmira's SNALP technology. The initiation of the ALN-VSP Phase 1 clinical trial triggered a milestone payment of $0.6 million (US$0.5 million) that was received and recorded as revenue in Q2 2009.

Roche revenue
Research and development collaborations revenue from Roche was $1.0 million for Q3 2009 as compared to $0.1 million for Q3 2008 and was $2.3 million for the first nine months of 2009 as compared to $0.1 million for the first nine months of 2008. Under the Roche Product Development Agreement dated May 2009 Roche pays for the provision of Tekmira staff and for certain external costs incurred. The company is recognizing revenue from the Roche Product Development Agreement in proportion to the services provided up to the reporting date by comparing actual hours spent to estimated total hours for each project under the contract. Revenue from external costs incurred on Roche product candidates is being recorded in the period that Roche is invoiced for those costs.

Tekmira received $0.8 million (US$0.8 million) during Q2 2009 under a separate Roche Research Agreement. Work under the Roche Research Agreement was completed in the first half of 2009 and the payment was recognized as research and development collaborations revenue during that period.

Expenses - Research, development and collaborations
Research and development expenses decreased to $4.4 million for Q3 2009 as compared to $5.4 million for Q3 2008 and decreased to $12.4 million for the first nine months of 2009 as compared to $13.1 million for the first nine months of 2008. As a result of the business combination with Protiva completed on May 30, 2008, the level and cost of research and development activities increased. Also, intellectual property portfolio and related expenses expanded. However, in the first nine months of 2008 research and development expenses were unusually high due to two compensation related charges. Firstly, stock based compensation for research and development staff was $0.2 million for the first nine months of 2009 as compared to $1.6 million for the first nine months of 2008 as early in 2008 Tekmira's Board approved the accelerated vesting of all Tekmira stock options concurrent with the announcement of the business combination with Protiva. Secondly, at the time of the business

combination, Tekmira accrued $2.0 million for payments due to its former CEO and this was allocated in Q2 2008 as 75% research and development expenses and 25% general and administrative expenses. There is no equivalent expense in 2009.

Research and development staff numbers have decreased to 64 at September 30, 2009 (total staff 75) as compared to 78 (total staff 94) at September 30, 2008. In October 2008 we reduced our workforce by 15 employees as part of the integration of the operations of Tekmira and Protiva.

Expenses - General and administrative
General and administrative expenses decreased to $0.9 million for Q3 2009 as compared to $1.1 million for Q3 2008 and decreased to $3.0 million for the first nine months of 2009 as compared to $3.6 million for the first nine months of 2008. Base line general and administrative costs have increased due to the greater size of the organization following the business combination. However, general and administrative expenses were unusually high in the first nine months of 2008 due to the two compensation related charges discussed in the research, development and collaborations expenses section above.

Liquidity and capital resources
At September 30, 2009, the company had cash, cash equivalents and short-term investments of approximately $26.9 million as compared to $31.9 million at December 31, 2008.

In the 2008 Annual Report the company provided guidance that there were sufficient funds on hand to continue product development until some time in the second half of 2010. As a result of signing the Roche Product Development Agreement Tekmira now believes that current funds on hand plus expected interest income and the contractually payable further funds from collaborations will be sufficient to continue product development until the second half of 2011 (see Forward-Looking Statements for a discussion of assumptions made in arriving at this estimate).

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

More particularly and without limitation, this press release contains forward-looking statements, assumptions and information concerning the company's potential, the potential of RNAi therapeutics as a treatment for disease, product development plans, the number and timing of advancement of products into clinical development, the plans of collaborative partners and the impact of those collaborations on product development activities and financial resources. There are circumstances and factors that may cause assessments included in these forward-looking statements to materially change. Such circumstances and factors include the failure of RNAi therapies to become commercially viable, Tekmira's inability or a collaborative partner's inability to develop commercially viable RNAi therapies and changes to the product development plans of collaboration partners.

Also included in this press release is an estimate of the length of time that Tekmira's business will be funded by its anticipated financial resources. There are circumstances and factors that may cause actual cash usage to be materially different from Tekmira's current estimate of the adequacy of its cash resources. Such circumstances and factors include the following: preclinical trials may not be completed, or clinical trials started, when anticipated; preclinical and clinical trials may be more costly or take longer to complete than currently anticipated; preclinical or clinical trials may not generate results that warrant future development of the tested drug candidate; funding and milestone payments from research and product development partners may not be provided when required under agreements with those partners; decisions to in-license or acquire additional products for development; Tekmira may become subject to product liability or other legal claims for which the

company has made no accrual in its financial statements; the sufficiency of budgeted capital expenditures in carrying out planned activities; and the availability and cost of labour and services.
With respect to the timing of the ApoB SNALP clinical trial discussed in this news release, there are circumstances that may cause the completion of the trial to be different than the time periods currently anticipated. These factors include delays in completing patient enrolment and the occurrence of adverse events. In addition, clinical trials may not demonstrate safety and efficacy in humans or the drug candidates may fail in development or be delayed to a point where they do not become commercially viable. With respect to the pre-clinical results discussed in this news release, there is no certainty that human clinical results will be consistent with pre-clinical results.

The business of Tekmira is also subject to other risks and factors that may cause actual results, events or developments to be materially different from any future results, events or developments expressed or implied by any forward-looking statement 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 Annual Information Form dated March 31, 2009 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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