

March 27, 2012

Tekmira Provides Corporate Update and Announces 2011 Results

Conference Call at 4:30 pm Eastern Time Today

VANCOUVER, British Columbia, March 27, 2012 (GLOBE NEWSWIRE) -- Tekmira Pharmaceuticals Corporation (Nasdaq:TKMR) (TSX:TKM), a leading developer of RNA interference (RNAi) therapeutics, announced its 2011 audited operating results and provided a corporate update.

"This year marked significant progress for us, and the overall RNAi field, with the presentation of data that demonstrated RNAi proof of concept in humans enabled by Tekmira's LNP technology. We believe our LNP technology represents the most widely adopted delivery technology for the systemic delivery of RNAi therapeutics, with Tekmira's LNP platform being used in multiple clinical trials by both Tekmira and its partners. We look forward to building further upon Tekmira's leadership in the RNAi field in the coming year," said Dr. Mark J. Murray, Tekmira's President and CEO.

"We are also making progress in our lawsuit against Alnylam and AlCana, which was filed in the Massachusetts Superior Court. A trial date has now been set for October 30, 2012, clarifying the time to resolution. Our goal today is the same as when we launched the litigation: to regain control of our LNP technology and preserve its full value for Tekmira shareholders. We still firmly believe this is the right and only course of action for us to pursue, as it respects the scientific work we have done to develop this important technology and it respects the investment that our shareholders have made in Tekmira. We look forward to reaching a resolution in 2012," added Dr. Murray.

Corporate Update and Highlights

Internal Product Development

- Tekmira continues to develop its TKM-Ebola product under a US\$140 million contract awarded by the U.S. Government's Transformational Medical Technologies (TMT) Program. The TMT contract will support the development of TKM-Ebola through FDA approval. A Phase 1 human clinical trial, which is a placebo-controlled, single-blind, single-ascending dose study with additional multiple-ascending dose cohorts in healthy human volunteers, is ongoing. The objective of the Phase 1 trial is to assess the safety and tolerability of TKM-Ebola and evaluate the pharmacokinetics and systemic exposure following both a single-ascending dose and multiple-ascending doses of TKM-Ebola. The TKM-Ebola product candidate will be developed under specific FDA regulatory guidelines (called the "Animal Rule"), which are designed to advance therapeutics that cannot meet the requirements for traditional approval because human efficacy studies are not feasible. Tekmira's work on the TKM-Ebola program also supports continued lipid nanoparticle technology innovations around process development, manufacturing scale-up, and lyophilization.
- In December 2010, Tekmira announced the initiation of patient dosing in a Phase 1 human clinical trial for TKM-PLK1 in patients with advanced solid tumors. The Phase 1 clinical trial, conducted at three oncology centers in the United States, is an open label, multi-dose, dose escalation study designed to evaluate the safety, tolerability and pharmacokinetics of TKM-PLK1 as well as determine the maximum tolerated dose. Secondary objectives of the trial are to measure tumor response and the pharmacodynamic effects of TKM-PLK1 in patients providing biopsies. A total of 20 patients have been enrolled and 82 doses have been administered to these patients. The trial continues to enroll patients and Tekmira expects to have established the maximum tolerated dose and release results over the next few months.

A second Phase 1 human clinical trial of TKM-PLK1 was initiated in collaboration with the United States National Cancer Institute (NCI). This trial's objectives included an assessment of drug activity in patients providing biopsies as a means of establishing human proof-of-concept for both RNAi and Tekmira's LNP technology. In late 2011 and early 2012 Alnylam Pharmaceuticals, Inc. disclosed interim clinical data from their ALN-TTR and ALN-PCS programs, both of which utilize Tekmira's LNP technology. As these data provide proof-of-concept for LNP mediated RNAi in human subjects, we have elected to discontinue the NCI trial, apply the resources that had previously been set aside to support the trial to other programs and have focused our collaboration with the NCI on research to identify novel oncology targets.

In June 2011, Tekmira secured licenses from Alnylam targeting two validated oncology targets: WEE1 and CSN5.
 Tekmira's collaborators at the National Cancer Institute (NCI) identified the novel cancer genes WEE1 and CSN5 from

human tumor samples. Gene expression data from human tumor samples indicate that both CSN5 and WEE1 are upregulated in a number of human cancers and have been identified as potential molecular targets in breast, liver, lung, ovarian and skin cancer, amongst other tumor types. Tekmira is conducting preclinical work to further evaluate these targets before initiating formal toxicology studies.

- In March 2012, Tekmira secured an exclusive license from Alnylam to develop TKM-ALDH2, a systemically delivered RNAi therapeutic that utilizes Tekmira's LNP technology for the treatment of Alcohol Dependence (AD). Currently, many approved treatments for AD have low response rates due to poor patient compliance. ALDH2 is a validated target with both genetic and pharmacological data supporting its role as a key player in alcohol avoidance. It is expected that TKM-ALDH2 could be administered as a "once-a-month" treatment of AD.
- In August 2011, Tekmira obtained an exclusive, worldwide license to a novel and proprietary RNAi technology called MV-RNA (multivalent RNA) from Halo-Bio RNAi Therapeutics, Inc. Halo-Bio's MV-RNA technology comprises single macromolecules capable of mediating RNAi at multiple unique target sites. MV-RNA can target three sites on a single gene or up to three separate genes simultaneously. Tekmira has successfully demonstrated multi-gene knockdown using MV-RNA enabled by proprietary LNP formulations.

Litigation Update

Tekmira has ongoing litigation with Alnylam and AlCana Technologies, Inc. where we have alleged misappropriation of
our proprietary lipid nanoparticle delivery technology, resulting in damage to our intellectual property and business
interests. Alnylam and AlCana have responded to our complaint and have filed counterclaims. On March 26, 2012,
Tekmira provided a periodic update to the ongoing litigation with Alnylam and AlCana. A trial date of October 30, 2012
has been set in Massachusetts Superior Court. Documents related to this lawsuit can be found on the Tekmira website
at: www.tekmirapharm.com.

Partners' Product Developments

- Tekmira's LNP technology is enabling the systemic RNAi product pipeline of Alnylam Pharmaceuticals, Inc. Tekmira continues to be the exclusive manufacturer of any LNP-based drug products required by Alnylam through to the end of Phase 2 clinical trials, including the products ALN-VSP, ALN-TTR and ALN-PCS. Over the past year, more data were released confirming RNAi proof-of-concept has been achieved in humans using Tekmira's LNP technology.
 - Alnylam has reported that product candidate, ALN-VSP, is being developed as a treatment for advanced solid tumors with liver involvement. ALN-VSP uses Tekmira's LNP technology and is manufactured by Tekmira. In June 2011, Alnylam presented Phase 1 human clinical trial data at American Society of Clinical Oncology (ASCO) meeting and disclosed that ALN-VSP was generally well tolerated, demonstrated evidence for anti-tumor activity, and was found to mediate RNAi activity in both hepatic and extra-hepatic tumors. Alnylam expects to partner its ALN-VSP program prior to initiating a Phase 2 clinical study.
 - Alnylam has reported that it is advancing two ALN-TTR formulations, ALN-TTR01 and ALN-TTR02. Both formulations are RNAi therapeutics targeting transthyretin (TTR) for the treatment of TTR-mediated amyloidosis (ATTR), a systemic disease caused by mutations in the TTR gene. ALN-TTR01 and ALN-TTR02 utilize Tekmira's LNP technology and are being manufactured by Tekmira. In November 2011, Alnylam presented preliminary Phase 1 clinical results for ALN-TTR01. Alnylam reported that ALN-TTR01 was safe and well tolerated and that ALN-TTR01 demonstrated rapid, dose-dependent, and durable lowering of serum TTR protein levels after a single dose in ATTR patients. In March 2012, Alnylam initiated dosing in its Phase 1 clinical trial with ALN-TTR02.
 - Alnylam has reported that it is also developing ALN-PCS, an RNAi therapeutic, to treat hypercholesterolemia, or high levels of cholesterol in the blood. ALN-PCS is manufactured by Tekmira and is enabled by Tekmira's LNP delivery technology. In January 2012, Alnylam presented positive preliminary results from its ongoing clinical trial of ALN-PCS. Alnylam reported that ALN-PCS was safe and well tolerated and that ALN-PCS demonstrated statistically significant RNAi silencing of PCSK9 of up to 66% and reductions of up to over 50% in levels of low-density lipoprotein cholesterol (LDL-C), or "bad" cholesterol, a clinically validated endpoint. Alnylam expects to partner its ALN-PCS program prior to initiating a Phase 2 clinical study. More detail and additional information about Alnylam's programs can be found at http://www.alnylam.com.
- Tekmira licensed three targeted chemotherapy product candidates, Marqibo, Alocrest and Brakiva, to Talon Therapeutics, Inc. in 2006. In 2010, the license agreement was amended such that Talon paid US\$5.75 million in consideration for reducing certain future payments associated with the product candidates. The payment of US\$5.75 million from Talon has been paid to former contingent creditors in full settlement of a contingent obligation. Tekmira is now eligible to receive milestone payments from Talon of up to US\$19.0 million upon achievement of further development

and regulatory milestones of the three product candidates as well as royalties on product sales. Talon is responsible for all future development and commercialization of the products.

Marqibo is a liposomal formulation of the chemotherapy drug vincristine. On July 18, 2011, Talon announced that its New Drug Application (NDA) for Marqibo had been submitted to the FDA seeking approval for the treatment of adult Philadelphia chromosome-negative ALL (adult acute lymphoblastic leukemia) in second or greater relapse or that has progressed following two or more lines of anti-leukemia therapy. On March 21, 2012, the Oncologic Drugs Advisory Committee voted 7 yes, 4 no, and 2 abstain that evidence from clinical studies supports a favorable benefit/risk assessment for use of Marqibo in the indicated population. The FDA is expected to review Talon's NDA by May 13, 2012. If approved, Tekmira would be eligible to receive a US\$1.0 million milestone payment and would also be eligible to receive royalties on product sales.

Financial Highlights

- In June 2011, Tekmira completed a \$5.1 million public equity offering, and, in December 2011 secured a US\$3.0 million credit facility, which may be drawn down at the company's discretion. More recently, in February 2012, Tekmira completed a \$4.1 million private placement equity offering.
- In February 2012, Tekmira updated its financial guidance. Tekmira believes its current funds on hand, following the
 February 29, 2012 private placement, plus expected income, including funds from collaborative partners and the U.S.
 Government and access to the loan facility from Silicon Valley Bank, will be sufficient to extend its cash runway until the
 second half of 2013. This projection includes continued investment in the advancement of Tekmira's product candidates
 and its lipid nanoparticle technology as well as the resolution of the ongoing Alnylam / AlCana litigation.

Financial Results

Net Loss

For the fiscal year ended December 31, 2011, the net loss was \$9.9 million (\$0.88 per common share) as compared to a net loss of \$12.4 million (\$1.20 per common share) for 2010.

Revenue

Revenue was \$16.6 million for 2011 as compared to \$21.4 million in 2010.

Over the past two years, Tekmira's principal sources of revenue have been from its Alnylam partnership entered into in March 2006, the Roche partnership which was expanded in May 2009 and a contract with the U.S. Government to develop TKM-Ebola which began in July 2010.

Under its U.S. Government contract to develop TKM-Ebola, Tekmira is being reimbursed for costs incurred, including an allocation of overheads, and is being paid an incentive fee. For this contract, Tekmira recorded \$11.5 million in revenue in 2011 as compared to \$3.6 million in 2010. This increase in revenue more than offset the loss of revenue from Tekmira's Roche collaboration that ended in November 2010 when Roche exited the RNAi field.

2010 revenue includes a \$5.9 million license amendment payment from Talon Therapeutics, Inc. The \$5.9 million was then paid to certain contingent creditors in full settlement of a contingent obligation and therefore was also included as a "loss on the purchase and settlement of exchangeable and development notes" in Tekmira's Q3 2010 income statement expenses. Talon is developing three targeted chemotherapy products, Marqibo, Alocrest and Brakiva under a legacy license agreement from Tekmira entered into in May 2006.

Research, development, collaborations and contracts expenses

Research, development, collaborations and contracts expenses were \$19.9 million in 2011 as compared to \$22.1 million in 2010.

Tekmira has been incurring significant TKM-Ebola program costs such as materials and preclinical studies that have been included in research, development, collaborations and contracts expenses. These costs are being reimbursed by the U.S. Government who is also paying for TKM-Ebola related labour costs and overheads and an incentive fee. Third party expenses on the Alnylam and Roche contracts were lower in 2011 as compared to 2010.

Spending on Tekmira's internal programs was lower in 2011 than in 2010. Spending on TKM-PLK1 has increased in 2011 as the Company moved into a Phase 1 clinical trial but TKM-ApoB spending has been reduced since mid-2010 when Tekmira

focused on the evaluation of new formulations for potential TKM-ApoB development.

General and administrative

General and administrative expenses were \$6.3 million in 2011 as compared to \$4.8 million in 2010. The increase in 2011 largely relates to legal fees incurred in respect of Tekmira's lawsuit with Alnylam and AlCana.

2012 financial guidance

At December 31, 2011, Tekmira had cash and cash equivalents of approximately \$9.2 million.

Total revenue is expected to be at a similar level in 2012 as in 2011. Tekmira expects U.S. Government contract revenue to increase over 2011 levels; however, this will be offset by lower expected 2012 Alnylam revenue as compared to 2011.

Total research, development, collaborations and contracts expenses are expected to decrease modestly in 2012 as compared to 2011 levels.

Total general and administrative expenses are expected to decrease in 2012 as compared to 2011 levels. In 2011, Tekmira incurred significant expenses for its lawsuit against Alnylam and AlCana. From March 2012 onwards, under a fixed monthly fee agreement with Orrick, Herrington and Sutcliffe LLP (Orrick), Tekmira's lead legal counsel for its lawsuit against Alnylam and AlCana, Tekmira will be required to reimburse Orrick for expenses incurred but no further payments will be required for professional fees. If Tekmira is successful in this lawsuit, a success fee will be paid to Orrick. Tekmira has not recorded this contingent obligation due to uncertainties related to the outcome of the lawsuit. At December 31, 2011, the contingent obligation was \$4.5 million (US\$4.4 million).

Tekmira believes that current funds on hand, following its February 29, 2012 private placement, plus expected income, including funds from collaborative partners and the U.S. Government and access to the loan facility from Silicon Valley Bank, will be sufficient to continue product development until the second half of 2013.

Conference Call Information

Tekmira will hold a conference call and webcast on Tuesday, March 27, 2012 at 1:30 pm Pacific Time (4:30 pm Eastern Time) to discuss 2011 results and a summary of corporate highlights. To access the conference call, please dial 914-495-8556 or 1-866-393-1607 and reference conference ID 64656710. The live webcast can be accessed through the Investor section of Tekmira's website at www.tekmirapharm.com.

An archived webcast will be available on the Tekmira website approximately two hours after the event. In addition, a replay of the conference call will be available until April 4, 2012 by calling 404-537-3406 or 1-855-859-2056 and referencing conference ID 64656710.

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. Tekmira believes its LNP technology represents the most widely adopted delivery technology for the systemic delivery of RNAi therapeutics. Tekmira's LNP platform is being utilized in multiple clinical trials by both Tekmira and its partners. Tekmira's LNP technology (formerly referred to as stable nucleic acid-lipid particles or SNALP) encapsulates siRNAs with high efficiency in uniform lipid nanoparticles that 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 news 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; the effects of Tekmira's products on the treatment of elevated low-density lipoprotein (LDL) cholesterol, cancer and infectious disease and alcohol dependence; the ALN-VSP, ALN-TTR, and ALN-PCS product development programs of Alnylam Pharmaceuticals, Inc.; Tekmira's expectations with respect to existing and future agreements with third parties; statements about the initiation and details of the TKM-Ebola Phase 1 human clinical trial; statements about the nature, prospects and anticipated timing to resolve the Tekmira's litigation with Alnylam and AlCana Technologies, Inc., including the patent infringement lawsuit; the nature, scope and quantum of damages sought by Tekmira from Alnylam and AlCana; statements about the injunction granted by the Supreme Court of British Columbia against certain individuals from AlCana; measures taken to ensure that Tekmira can pursue the litigation with Alnylam and AlCana without interruption to Tekmira's core business activities; statements about the USPTO patent interference proceedings between Alnylam and Tekmira; estimates and scope of Tekmira's financial guidance and expected cash runway; 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, infectious disease, and alcohol dependence; the developmental milestones and approvals required to trigger funding for TKM-Ebola from the Transformational Medical Technologies program; results in nonhuman primates are indicative of the potential effect in humans; Tekmira's research and development capabilities and resources; U.S. Food and Drug Administration (FDA) approval with respect to commencing clinical trials; 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 and the manufacturing agreement with Alnylam; the nature and prospects of the litigation with Alnylam and AlCana, including the patent infringement lawsuit filed by Alnylam; based on the conduct of Alnylam and AlCana, the nature, scope and quantum of damages that Tekmira is entitled to; costs and timing of the litigation with Alnylam and AlCana and the effects of such on Tekmira's financial position and execution of Tekmira's business strategy; the effect of Alnylam's and AlCana's answers and counterclaims on Tekmira's litigation position; 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 labor 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; 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; 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 and Alnylam will not be received by Tekmira on a timely basis, or at all, or in the quantum expected by Tekmira; the U.S. Government may reduce or cancel certain defense spending, including Tekmira's contract to develop TKM-Ebola; FDA may decide that our TKM-Ebola "Animal Rule" data is insufficient for approval and require additional pre-clinical, clinical or other studies, refuse to approve TKM-Ebola, or place restrictions on our ability to commercialize TKM-Ebola; the release of data from the TKM-Ebola Phase 1 human clinical trial may not occur in the expected timeframe, 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; Tekmira may become subject to product liability or other legal claims for which the Company has made no accrual in its financial statements; TKM-ALDH2 may not prove to be effective in the treatment of AD; the FDA may not review Talon's NDA for Margibo in the estimated timeframe, or at all; U.S. Government

contract revenue may not increase over 2011 levels; Tekmira's cash runway may not extend as far as anticipated, and may be substantially less than required to continue current operations; the final outcome of the litigation with Alnylam and AlCana is not presently determinable or estimable and may result in an outcome that is unfavorable to Tekmira, including damages and other relief against Tekmira claimed by Alnylam and AlCana in their counterclaims; there may be no basis for which Tekmira has any rights or entitlement to damages from Alnylam or AlCana in the quantum anticipated by Tekmira, or at all; legal expenses associated with litigation are uncertain and may exceed current estimates, which may have a material adverse effect on Tekmira's financial position and ongoing business strategy; document production completion and/or the trial date may not occur by the dates currently estimated; the uncertainty of litigation, including the time and expenses associated therewith; risks and uncertainties involved in the litigation process, such as discovery of new evidence or acceptance of unanticipated or novel legal theories, changes in interpretation of the law due to decisions in other cases, the inherent difficulty in predicting the decisions of judges and juries and the possibility of appeals; Tekmira has not sufficiently budgeted for capital expenditures necessary to carry out planned activities including the litigation against Alnylam and AlCana.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's Annual Report on Form 20-F for the year ended December 31, 2011, which is available at www.sedar.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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