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Tekmira's Lipid Nanoparticle (LNP) Technology Highlighted in Two Peer-Reviewed Scientific Publications

Published Data Shows 100% Protection Against Multiple Strains of Marburg Virus in Animal Model Using RNAi Therapeutic Developed by Tekmira and Its Collaborators

ALN-TTR Results Enabled by Tekmira's LNP Technology as Highlighted in the New England Journal of Medicine Provide Robust Proof of Concept for RNAi Therapy in Man

VANCOUVER, British Columbia, Aug. 30, 2013 (GLOBE NEWSWIRE) -- Tekmira Pharmaceuticals Corporation (Nasdaq:TKMR) (TSX:TKM), a leading developer of RNA interference (RNAi) therapeutics, announced the publication of two articles in peer-reviewed scientific journals — the *Journal of Infectious Diseases* and *New England Journal of Medicine* — that highlight results enabled by Tekmira's lipid nanoparticle (LNP) technology.

"These recently published data further validate the broad applicability of Tekmira's industry-leading LNP technology platform. Our work with our collaborators at UTMB has resulted in the first report of complete post-exposure protection against the most pathogenic strain of Marburg virus. These findings build upon our work in infectious diseases — including our TKM-Ebola program, an anti-Ebola viral therapeutic currently in development under a \$140 million contract awarded by the U.S. Government and entering a Phase I clinical trial early in 2014 — and provide a foundation for future infectious disease therapeutics," said Dr. Mark J. Murray, Tekmira's President and CEO.

"Tekmira's LNP technology is also enabling the rapid, dose-dependent, durable, and specific knockdown of TTR in clinical trials of Alnylam's ALN-TTR01 and ALN-TTR02 RNAi therapeutic products. Specifically, the ALN-TTR02 data points to our LNP delivery technology providing improved potency and demonstrating up to a 94% reduction of serum TTR with ALN-TTR02," added Dr. Murray.

The study published in the *Journal of Infectious Diseases* results from a collaboration between Tekmira and the University of Texas Medical Branch (UTMB). The paper, entitled "Protection against Lethal Marburg Virus Infection Mediated by Lipid Encapsulated siRNA" showed 100% protection in guinea pig models against the Angola, Ci67 and Ravn strains of the Marburg virus using a broad spectrum RNAi therapeutic enabled by Tekmira's LNP (Ursic-Bedoya et al., J Infect Dis.(2013) [Online early access]. doi: 10.1093/infdis/jit465. First published online: August 29, 2013).

In 2010, Tekmira and UTMB were awarded a National Institutes of Health (NIH) grant to support research to develop RNAi therapeutics to treat Ebola and Marburg hemorrhagic fever viral infections. The grant is supporting ongoing work at Tekmira and at UTMB including work advancing these promising results into non-human primates.

Complete study results from Phase I trials with ALN-TTR01 and ALN-TTR02 were published in the *New England Journal of Medicine* in a paper entitled "Safety and Efficacy of RNAi Therapy for Transthyretin Amyloidosis" (Coelho et al., N Engl J Med 2013; 369:819-29). ALN-TTR01 and ALN-TTR02 are systemically delivered RNAi therapeutics that use Tekmira's LNP technology and target transthyretin (TTR), the disease-causing protein in TTR-mediated amyloidosis (ATTR). ALN-TTR01 and ALN-TTR02 are being developed by Alnylam Pharmaceuticals, Inc. (Nasdaq:ALNY). More detailed information about the Phase I trials with ALN-TTR01 and ALN-TTR02 can be found in Alnylam's news release dated August 28, 2013, which has been posted at www.alnylam.com.

Tekmira has granted Alnylam a license to use Tekmira's LNP technology to advance RNAi therapeutic products, and Tekmira is eligible to receive milestones and royalties as Alnylam's LNP enabled products are developed and commercialized. Tekmira is entitled to receive a \$5 million milestone payment when ALN-TTR02 enters a pivotal or Phase III clinical trial, which Alnylam has guided should occur by the end of 2013. Tekmira is eligible to receive royalty payments based on commercial sales of ALN-TTR02.

About RNAi and Tekmira's LNP

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.

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 Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi (ribonucleic acid interference) product development programs; Tekmira's collaboration with UTMB; the first reported results of complete post-exposure protection against the most pathogenic strain of Marburg virus; the expected initiation of a Phase I clinical trial for TKM-Ebola; Alnylam's ALN-TTR product development programs; the development timeline and expected milestone payments associated with Alnylam's ALN-TTR program; the advancement of products that utilize Tekmira's lipid nanoparticle technology; expectations regarding the advancement of multiple product candidates; the quantum and timing of further clinical data being presented for LNP-enabled products; continued innovation and protection of LNP technology; timing of the initiation of clinical trials and release of clinical data from Tekmira's product candidates; the quantum and timing of potential milestone and royalty payments; and the use of lipid nanoparticle technology by Tekmira's licensees.

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 infectious disease, or other diseases; results in preclinical models 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; 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 partners, including Alnylam; Tekmira's financial position and its ability to execute on its business strategy; and Tekmira's ability to protect its intellectual property rights and not to infringe on the intellectual property rights of others. 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: Tekmira's research and development capabilities and resources may not meet current or expected demand; Tekmira's products may not prove to be effective in the treatment of infectious disease, or other diseases; Tekmira may not obtain and protect intellectual property rights, and operate without infringing on the intellectual property rights of others; Tekmira may face competition from other pharmaceutical or biotechnology companies and the possibility that other organizations have made advancements in RNAi delivery technology that Tekmira is not aware of; pre-clinical and clinical trials may be more costly or take longer to complete than anticipated and may not generate results that warrant future development of the tested drug candidate; 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; the FDA may not approve the commencement of Tekmira's planned clinical trials or approve the use of Tekmira's products; Tekmira may not initiate a new TKM-Ebola Phase I clinical trial in the anticipated timeframe, or at all; Tekmira's development partners and licensees conducting clinical trial, development programs and joint venture strategic alliances may not result in expected results on a timely basis, or at all; a Phase III or pivotal trial for ALN-TTR02 may not start as currently anticipated, or at all; expected milestone or royalty payments from Alnylam may not be received in the quantum and on the timing currently anticipated, or at all; future operating results are uncertain and likely to fluctuate; Tekmira may not be able 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 may become subject to product liability or other legal claims for which Tekmira has made no accrual in its financial statements; and the possibility that Tekmira may not have sufficiently budgeted for expenditures necessary to carry out planned activities.

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, 2012 (Annual Report), which is available at www.sedar.com or at www.sec.gov/edgar.shtml. 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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