UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of May 2012.

Commission File Number: **001-34949**

Tekmira Pharmaceuticals
(Translation of registrant's name into English)

100-8900 Glenlyon Parkway
Burnaby, British Columbia
Canada, V5J 5J8
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-F [x] Form 40-F [ ]

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ___

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ___

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934. Yes [ ] No [x]

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-___.

On May 10, 2012 the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

(c) Exhibit 99.1. Press release dated May 10, 2012

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tekmira Pharmaceuticals
(Registrant)

Date: May 10, 2012

/s/ IAN C. MORTIMER
Ian C. Mortimer
Executive Vice President, Finance and Chief Financial Officer

Tekmira's LNP Technology Enables Alnylam's ALN-TTR01 Clinical Data

VANCOUVER, British Columbia, May 10, 2012 (GLOBE NEWSWIRE) -- Tekmira Pharmaceuticals Corporation (Nasdaq:TKMR) (TSX:TKM), a leading developer of RNA interference (RNAi) therapeutics, today reported that Alnylam Pharmaceuticals, Inc. presented clinical results from its completed Phase 1 clinical trial with ALN-TTR01, an RNAi therapeutic targeting transthyretin (TTR) for the treatment of TTR-mediated amyloidosis (ATTR), which utilizes Tekmira's lipid nanoparticle (LNP) technology and is manufactured by Tekmira.

"We are pleased that data from the ALN-TTR01 Phase 1 human clinical trial continues to demonstrate that Tekmira's technology is well tolerated and is enabling the development of RNAi products. Tekmira continues to develop and advance its industry-leading LNP delivery platform to enable RNAi therapeutics for a variety of clinical indications," said Dr. Mark J. Murray, Tekmira's President and CEO.

The new data were presented at the XIII International Symposium on Amyloidosis held in Groningen, The Netherlands updating interim data that was released late last year. Alnylam reported results that showed that administration of ALN-TTR01 resulted in statistically significant reductions in serum TTR protein levels, including both wild-type and mutant TTR protein, in ATTR patients. Knockdown of TTR, the disease-causing protein, was found to be dose dependent, rapid, and durable after just a single dose. ALN-TTR was found to be generally safe and well tolerated in this study.

Alnylam is developing a second product candidate called ALN-TTR02, which also utilizes Tekmira's LNP technology and is manufactured by Tekmira. Alnylam has initiated a Phase 1 trial with ALN-TTR02 aimed at evaluating safety, tolerability, and clinical activity of ALN-TTR02 in healthy volunteers. Alnylam expects to present data from this study in the third quarter of 2012.

For more detailed information about the Phase 1 data for ALN-TTR01, please refer to the Alnylam news release dated May 10, 2012 and the presentation of these data, which can be found on Alnylam's website at www.alnylam.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 "siRNA," 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

Tekmira 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; data from a Phase 1 human clinical trial with ALN-TTR01 conducted by Alnylam; Alnylam's ALN-TTR01 and ALN-TTR02 product development programs as a treatment for ATTR; expectations regarding timing of the ALN-TTR02 data; 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 funding; 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; early results in human clinical trials are indicative of the

potential opportunity to treat a variety of disease indications; Tekmira's research and development capabilities and resources; 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 Alnylam; and the sufficiency of budgeted capital expenditures in carrying out planned 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 current and future data from the human clinical trials with ALN-TTR01 and ALN-TTR02 conducted by Alnylam does not and will not lead to favourable results for Tekmira's products or prospects; the possibility that there will not be further clinical data on LNP-enabled products in the quantum nor timing anticipated by Tekmira, or at all; the timing of data from the ALN-TTR02 clinical trial may not be presented as expected or at all; the possibility that Tekmira may not be able to innovate nor protect its LNP technology; 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; difficulties, delays or inaccuracies in the progress, timing, results and data from clinical trials and studies; the possibility that Tekmira may not advance any further product candidates; competition from other pharmaceutical or biotechnology companies; Tekmira's development partners and licensees conducting clinical trials 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 will not be received by Tekmira on a timely basis, or at all, or in the quantum expected by Tekmira; IND applications may not be filed on a timely basis, pre-clinical trials may not be completed, or clinical trials started, when anticipated or at all; 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; and 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 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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