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 OF
THE SECURITIES EXCHANGE ACT OF 1934

For the month of January 2011

Commission File Number: 001-34949

Tekmira Pharmaceuticals Corporation

(Translation of Registrant's Name Into English)

100-8900 Glenlyon Parkway
Burnaby, British Columbia
Canada, V5J 5J8
(Address of Principal Executive Offices)

(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 ☒ 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): ☐

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): ☐

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 ☒

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

EXHIBITS

The following exhibit is a press release issued by Tekmira Pharmaceuticals Corporation:

Exhibit Number	Description
99.1	Press release dated January 10, 2011

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 CORPORATION
(Registrant)

Date: January 10, 2011

By: /s/ Ian C. Mortimer
Name: Ian C. Mortimer
Title: Executive Vice President, Finance and Chief Financial Officer

Exhibit 99.1

Proof of RNAi in Man Strengthens Leadership Position of Tekmira's LNP Delivery Technology

For immediate release: **January 10, 2011**

Vancouver, BC — Tekmira Pharmaceuticals Corporation (Nasdaq: TKMR, TSX: TKM), a leading developer of RNA interference (RNAi) therapeutics, today provided the following comment on Alnylam Pharmaceuticals, Inc.'s recently presented data from a Phase 1 human clinical trial for ALN-VSP showing that analysis of human tissue samples demonstrated proof of RNAi in man. ALN-VSP utilizes Tekmira's LNP technology, the only RNAi delivery technology supporting multiple clinical candidates being advanced by Tekmira and its partners in multiple disease indications.

Dr. Mark J. Murray, Tekmira's President and CEO, said, "Last week, Tekmira's partner Alnylam presented clinical data from patients with advanced solid tumors with liver involvement treated with ALN-VSP, which demonstrated RNAi activity in humans. This was an important accomplishment by Alnylam and an exciting event for Tekmira, as it confirms that our LNP technology enables bona fide RNAi activity in man. Tekmira's LNP technology has been established as the leading RNAi delivery technology based on both the number of product candidates being advanced and the breadth of therapeutic indications it underpins."

"Human proof-of-concept is an important advancement in the field of RNAi drug development. At Tekmira, we intend to build on this momentum in 2011 with clinical data of our own as well as new partnering relationships. We believe the future is extremely promising for the field of RNAi therapeutics and we remain focused on advancing our therapeutic pipeline and supporting our partners, which depend on our LNP technology to advance their own clinical programs."

"Internally, we are accelerating our discovery efforts and expect to be in a position to advance multiple product candidates over the next few years. We will also continue to build upon our leadership position in delivery as we make advancements in LNP potency and tolerability as well as targeting new disease sites," added Dr. Murray.

Tekmira's LNP or lipid nanoparticle delivery technology represents the leading delivery technology in the RNAi field and supports Tekmira's internal product development and pharmaceutical partnering activities. Tekmira has licensed its LNP technology to Alnylam and Merck and has ongoing collaborative relationships with Takeda Pharmaceutical Company Limited, Pfizer, Bristol-Myers Squibb as well as additional undisclosed pharmaceutical and biotechnology companies. Tekmira also has a contract with the U.S. Government's Transformational Medical Technologies (TMT) program worth up to $140 million to advance TKM-Ebola.

Products being advanced utilizing Tekmira's LNP technology include Tekmira's internal product candidates, licensed under Alnylam's intellectual property, as well as Alnylam's systemic product

candidates. In December, Tekmira announced that it has initiated patient dosing in a Phase 1 human clinical trial for its lead oncology product, TKM-PLK1. TKM-PLK1 targets polo-like kinase 1, or PLK1, a cell cycle protein involved in tumor cell proliferation and a validated oncology target. Earlier in 2010, Tekmira published data in *The Lancet* demonstrating the ability of TKM-Ebola to completely protect non-human primates from Ebola virus, a highly contagious and lethal human infectious disease. Tekmira expects to file an Investigational New Drug application for TKM-Ebola in the second half of 2011 to initiate a Phase 1 clinical trial. Tekmira is currently evaluating several LNP formulations for use in its TKM-ApoB program before it initiates a Phase 1-2 clinical trial for that product candidate.

Alnylam's product candidates being advanced using Tekmira's technology include ALN-VSP, which is continuing in a Phase 1 clinical trial; ALN-TTR01, which is in a Phase 1 clinical trial as a treatment for transthyretin-mediated amyloidosis; and ALN-PCS, which is expected to enter a Phase 1 clinical trial in 2011 as a treatment for hypercholesterolemia.

Tekmira's LNP technology encapsulates RNA-based drugs with high efficiency through a proprietary manufacturing process that is robust, scalable and highly reproducible. LNP-based products have been reviewed by the United States Food and Drug Administration and European health regulators for use in human clinical trials.

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. 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 that are effective in delivering RNAi therapeutics to disease sites in numerous preclinical models. Tekmira's LNP formulations are manufactured by a proprietary method that 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 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, including ALN-VSP; expectations regarding the advancement of multiple product candidates; the timing of the filing of an IND application for TKM-Ebola;

timing of the initiation of clinical trials and release of clinical data from Tekmira's product candidates; the quantum and timing of potential funding; use of lipid nanoparticle technology by Tekmira's licensees; the effects of Tekmira's products on the treatment of cancer and infectious disease; and Tekmira's expectations with respect to existing and future agreements with third parties.

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 cancer and infectious disease; 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 the U.S. Government; 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 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 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; 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 Short Form Base Shelf Prospectus dated November 4, 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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