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 June 2011.

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 June 2, 2011 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 June 2, 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
(Registrant)

Date: June 2, 2011

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

Tekmira Expands Oncology Pipeline With RNAi Therapeutic Targeting Novel Cancer Genes WEE1 and CSN5

VANCOUVER, B.C., June 2, 2011 (GLOBE NEWSWIRE) -- Tekmira Pharmaceuticals Corporation (Nasdaq:TKMR) (TSX:TKM), a leading developer of RNA interference (RNAi) therapeutics, announced today that it has secured licenses from Alnylam Pharmaceuticals, Inc. under its InterfeRx™ program to develop a new RNAi therapeutic targeting two validated oncology targets: WEE1 and CSN5.

"Our collaborators at the National Cancer Institute (NCI) have identified the novel cancer genes WEE1 and CSN5 from human tumor samples, and together we have generated encouraging preclinical data by leveraging our expertise in siRNA design and delivery. We are excited about the opportunity to develop an RNAi therapeutic targeting these two unique cancer genes," said Dr. Mark J. Murray, Tekmira's President and CEO.

Some highlights from the promising data generated in collaboration with Tekmira's partners at the National Cancer Institute and published in leading scientific journals and at scientific conferences include:

- Gene expression data from human tumor samples indicate that both CSN5 and WEE1 are up-regulated 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. These key genes promote tumor cell growth and cancer pathogenesis.

- WEE1 is a tyrosine kinase that regulates cell cycle progression and the response to DNA damage by its control of a cell cycle checkpoint that precedes entry into cell division. Inhibiting WEE1 increases cancer cell sensitivity to DNA damaging agents and other therapies.

- CSN5 is the catalytic center of the COP9 signalosome, a multi-protein complex involved in regulating protein degradation via the ubiquitin proteasome pathway. CSN5 regulates protein turnover and other protein interactions that affect many stages of tumorigenesis. Silencing of CSN5 causes molecular changes that inhibit tumor cell growth and increases apoptosis (programmed cell death).

- Lipid nanoparticle (LNP) delivery of siRNA targeting WEE1 effectively suppresses tumor growth and increases the survival of treated animals in preclinical models of human hepatocellular carcinoma (HCC or liver cancer) in a dose-dependent manner.

- LNP delivery of siRNA against CSN5 resulted in 80% inhibition of tumor cell growth *in vitro* and significant reduction in tumor growth in preclinical models of human liver cancer.

- A combination RNAi approach that depletes both WEE1 and CSN5 may be ideal for inactivating multiple pathways that promote cancer, and to avoid cellular resistance. Combinations of WEE1 and CSN5 siRNA resulted in a significant increase in apoptosis in human liver cancer cells *in vitro*, relative to the action of each siRNA alone.

Tekmira is conducting additional preclinical work on a WEE1/CSN5 product candidate including the evaluation of a number of tumor specific LNP formulations prior to initiating formal toxicology studies required for filing an Investigational New Drug application.

Tekmira has access to eight InterfeRx licenses at pre-negotiated financial terms and has identified the first five targets, including ApoB, PLK1, Ebola, WEE1 and CSN5.

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 which 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 pre-clinical data from Tekmira's collaboration with the U.S. National Cancer Institute related to the WEE1 and CSN5 oncology targets; the potential to silence the WEE1 and CSN5 genes and the effect on the treatment of liver cancer and other cancers; additional preclinical work on the WEE1/CSN5 product candidate; the initiation of formal toxicology studies required for filing an Investigational New Drug application; Tekmira's strategy, future operations, clinical trials, prospects and plans of management; Tekmira's RNAi product development programs; the results of LNP delivery of siRNA targeting CSN5 and/or WEE1; any future results from Tekmira's collaboration with the United States National Cancer Institute; and the timing of release of clinical data.

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 LNP delivery technology; the effectiveness of Tekmira's RNAi product development programs, including a product candidate targeting WEE1 and/or CSN5; and the extent of Tekmira's research, development and manufacturing capabilities and resources. 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 siRNA enabled by Tekmira's LNP delivery technology is ineffective in the treatment of liver cancer or other cancers; the possibility that Tekmira and the NCI's collaboration fail to identify novel cancer targets or demonstrate anti-tumor activity by silencing the WEE1 and CSN5 genes through RNA interference; the possibility that additional preclinical work on the WEE1 and CSN5 product candidate is not completed on a timely basis, or at all; the possibility that formal toxicology studies are not initiated and/or no Investigational New Drug application is filed for the WEE1 and/or CSN5 product candidate; the possibility that other organizations have made advancements in RNAi delivery technology that Tekmira is not aware of; Tekmira's development programs, including its collaboration with the United States National Cancer Institute, will not result in expected results on a timely basis, or at all.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's Annual Information Form dated March 30, 2011 and 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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