

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

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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 April 2013.

Commission File Number: 001-34949

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**Tekmira Pharmaceuticals**

*(Translation of registrant's name into English)*

**100-8900 Glenlyon Parkway  
Burnaby, British Columbia  
Canada, V5J 5J8**

*(Address of principal executive office)*

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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): \_\_\_\_

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): \_\_\_\_

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**DOCUMENTS FILED AS PART OF THIS FORM 6-K**

See the Exhibit Index hereto.

**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**

Date: April 9, 2013

By: /s/ IAN C. MORTIMER

Name: Ian C. Mortimer

Title: *Executive Vice President, Finance and Chief Financial Officer*

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**EXHIBIT INDEX**

<u>Exhibit</u>	<u>Description</u>
99.1	Press release dated April 9, 2013

## **Tekmira Presents Data From Its TKM-PLK1 Phase I Clinical Trial at American Association for Cancer Research (AACR) Meeting**

*TKM-PLK1 Resulted in Clinical Benefit in 44% of Evaluable Patients Receiving Doses in Effective Range*

*Tekmira to Initiate a Phase II Clinical Trial in Gastrointestinal Carcinoid (Neuroendocrine) Cancer*

*Conference Call at 4:30 pm ET Today*

VANCOUVER, B.C., April 9, 2013 (GLOBE NEWSWIRE) -- Tekmira Pharmaceuticals Corporation (Nasdaq:TKMR) (TSX:TKM), a leading developer of RNA interference (RNAi) therapeutics, announced the results of its Phase I clinical trial with TKM-PLK1, an RNAi therapeutic for the treatment of solid tumors. The data are being presented today at 3:30 pm ET at the annual meeting of the American Association for Cancer Research (AACR) in an oral presentation entitled "A phase I dose escalation study of TKM-080301, a RNAi therapeutic directed against PLK1, in patients with advanced solid tumors." In this Phase I study, TKM-PLK1 was generally well-tolerated and showed encouraging signs of drug activity with RNAi activity confirmed in tumor biopsy.

"We are very pleased with the results of our TKM-PLK1 Phase I clinical trial in a population of advanced cancer patients with solid tumors. The data generated from this clinical trial demonstrated that TKM-PLK1 was generally well-tolerated. In particular, we are very encouraged that four out of nine (44%) evaluable patients treated at doses in a range consistent with preclinical efficacy showed clinical benefit. In addition, we have confirmed RNAi activity in tumor biopsy. A variety of tumor types were treated in this Phase I study, but of particular note, of the two patients enrolled with gastrointestinal carcinoid (neuroendocrine) cancer, both responded to treatment with TKM-PLK1, and we look forward to initiating a Phase II clinical trial in this indication where there is a significant unmet medical need," said Dr. Mark J. Murray, Tekmira's President and CEO.

TKM-PLK1, which employs a unique lipid nanoparticle (LNP) formulation for oncology applications, was administered to 24 patients at doses ranging from 0.15 mg/kg to 0.90 mg/kg; with a total of 152 doses administered and a mean number of 6.2 doses per patient (range of 1-31 doses). The most common grade 1-2 adverse events were rigors (33%) and fever (25%). No dose-dependent changes in liver function tests were observed. Dose-limiting toxicities included: one grade 3 transient thrombocytopenia in one patient (at 0.9 mg/kg) and one grade 3 hypoxia/dyspnea in another patient (at 0.9 mg/kg). Based on these data, the maximum tolerated dose is estimated to be 0.75 mg/kg. A 10-patient expansion cohort is currently enrolling patients at 0.75 mg/kg, with data expected later this year.

Patients had a mean of 5.1 prior treatment regimens (range of 1-14). Forty-four percent (4 out of 9) patients evaluable for response, treated at a dose equal to or greater than 0.6 mg/kg, showed clinical benefit. In particular, one patient with progressive, metastatic appendiceal carcinoid (neuroendocrine) cancer had a durable partial tumor response based on RECIST criteria, continuing for more than 10 months. Three other patients achieved stable disease, including one patient with metastatic appendiceal carcinoid (neuroendocrine) cancer, another patient with metastatic colorectal cancer, and a third patient with metastatic adrenocortical carcinoma.

"PLK1 has been a target of interest for years, and we know from the medical literature that patients with elevated levels of PLK1 in their tumors exhibit poorer prognosis and survival rates. By using an RNAi approach and exploiting its naturally occurring mechanism of action, we can potentially overcome the limitations of other approaches and effectively silence PLK1. The safety data, drug activity and anti-tumor activity with TKM-PLK1 are encouraging, and I look forward to the further development of this promising therapeutic," said Dr. Ramesh K. Ramanathan, Medical Director of the Virginia G. Piper Cancer Center Clinical Trials Program at Scottsdale Healthcare and deputy director of the Clinical Translational Research Division of the Translational Genomics Research Institute (TGen) in Phoenix, Arizona.

Patients were dosed on a weekly protocol with each four week cycle consisting of three once weekly doses followed by a rest week. Pharmacokinetic data showed that C<sub>max</sub> (peak serum concentration of drug) and area under the curve (AUC) were dose proportional, without evidence of drug accumulation, and that the pharmacokinetic profile of TKM-PLK1 is maintained through multiple cycles. Pre-clinical animal pharmacokinetic data were predictive for the observed results in humans. Importantly, the data confirm that the drug exposure levels achieved in this trial, incorporating Tekmira's proprietary LNP formulation specifically designed to facilitate siRNA delivery to disseminated disease sites, are several fold greater than were achieved in clinical trials using earlier LNP formulations.

### **TKM-PLK1 Phase II Clinical Trial**

Tekmira expects to initiate a Phase II clinical trial in patients with previously treated gastrointestinal carcinoid (neuroendocrine) cancer in the second half of 2013. Details of the trial design will be disclosed later this year. Tekmira is also evaluating additional indications for Phase II development and will provide guidance later this year. Tekmira also expects to present data from the expansion cohort of the TKM-PLK1 Phase I clinical trial this year.

### **About Gastrointestinal Carcinoid (Neuroendocrine) Tumors**

Neuroendocrine tumors (NETs) consist of a spectrum of malignancies that can arise from neuroendocrine cells throughout the body. These tumors are characterized by their ability to produce peptides that cause characteristic hormonal syndromes. Metastatic

gastrointestinal carcinoid (neuroendocrine) tumors often have a poor prognosis and may have an aggressive clinical course. It is estimated that more than 12,000 new cases of carcinoid/NETs are diagnosed each year, and at least 115,000 people are living with carcinoid/NETs in the United States. The treatment of patients with gastrointestinal neuroendocrine tumors remains a challenge with few treatment options available.

### **About TKM-PLK1 Phase I Study Design**

The TKM-PLK1 Phase I clinical trial, conducted at oncology centers in the United States, was 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.

### **Conference Call Information**

Tekmira will hold a conference call and webcast today (Tuesday, April 9, 2013) at 1:30 pm Pacific Time (4:30 pm Eastern Time) to discuss results of the TKM-PLK1 Phase I clinical trial. A live audio webcast of the call can be accessed through the Investor section of Tekmira's website at [www.tekmirapharm.com](http://www.tekmirapharm.com). Or, alternatively, to dial into the conference call, please call 914-495-8556 or 1-866-393-1607.

An archived webcast of this conference call will be available on the Tekmira website approximately two hours after the event. Or alternatively, you may access a replay of the conference call by calling 404-537-3406 or 1-855-859-2056 and referencing conference ID 33014753.

### **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](http://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 statements about Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi (ribonucleic acid interference) product development programs; the results of the Phase I clinical trial with TKM-PLK1; and the effects of Tekmira's products on the treatment of cancer, including gastrointestinal carcinoid (neuroendocrine) tumors; the expected completion and release of data from the expansion cohort of the TKM-PLK1 Phase I clinical trial later this year; the evaluation of additional indications for Phase II development, and guidance thereon; and, the expected timing of the release of details about, and the initiation of, a Phase II clinical trial for TKM-PLK1.

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, including gastrointestinal carcinoid (neuroendocrine) cancer; 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 time required to complete research and product development activities; 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: the completion of and timing of the release of the data from the expansion cohort of the TKM-PLK1 Phase I clinical trial may not occur as anticipated, or at all; Tekmira might not release

details about the TKM-PLK1 Phase II trial design in the timeframe anticipated, or at all; TKM-PLK1 might not enter into Phase II clinical trials in the timeframe anticipated, or at all; 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 products may not prove to be effective in the treatment of cancer, including gastrointestinal carcinoid (neuroendocrine) tumors; 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; 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; and the possibility that Tekmira has not 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](http://www.sedar.com) or at [www.sec.gov/edgar.shtml](http://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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