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 March 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 March 30, 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: March 30, 2011

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

Tekmira Provides Corporate Update and Reports 2010 Audited Results

Conference Call at 12 noon Eastern Time Today

FOR IMMEDIATE RELEASE: **March 30, 2011**

Vancouver, BC — Tekmira Pharmaceuticals Corporation (Nasdaq: TKMR, TSX: TKM), a leading developer of RNA interference (RNAi) therapeutics, announced today its 2010 audited operating results and provided a corporate update.

“In 2010, Tekmira further strengthened its leadership in the field of RNAi therapeutics by growing our diversified recurring revenue stream, advancing our own proprietary product candidates, funding continued R&D innovation, supporting the advancement of our partners’ product candidates, and attracting new strategic partners,” said Dr. Mark J. Murray, Tekmira’s President and CEO.

“Tekmira’s lipid nanoparticle technology is the only RNAi delivery technology supporting multiple clinical candidates – from Tekmira and our partners – in a variety of disease indications. We continue to build upon our leadership position and invest in Tekmira’s technology platform by making advancements in LNP potency, tolerability, biodistribution, targeting, process development and manufacturing as well as the evaluation of new RNAi payloads. We expect these efforts will result in numerous scientific publications and new opportunities throughout the remainder of 2011,” added Dr. Murray.

2010 Corporate Highlights

Tekmira’s Product Development Programs

- Tekmira 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. The Phase 1 clinical trial, conducted at three medical centers in the United States, is an open label, multi-dose, multi-cycle, dose-escalation study designed to evaluate the safety, tolerability and pharmacokinetics of TKM-PLK1 as well as the determination of the maximum tolerated dose in patients with advanced solid tumors. Secondary objectives of the trial will be to measure tumor response as well as the pharmacodynamic effects of TKM-PLK1 in patients providing biopsies.
- Tekmira is developing its TKM-Ebola product under a US$140 million contract awarded by the U.S. Government’s Transformational Medical Technologies (TMT) Program. The TMT contract will support the development of TKM-Ebola through to FDA approval. The TKM-Ebola program is well underway in support of an investigational new drug (IND) application to be filed in the second half of 2011. Tekmira’s work on the TKM-Ebola program also supports continued lipid nanoparticle (LNP) technology innovations around process development, manufacturing scale-up, and lyophilization.
- Tekmira has made significant advances in LNP formulation development, and there are several alternative LNP formulations with improved characteristics that are currently being evaluated for TKM-ApoB development as well as for other metabolic target indications. Guidance on next steps for TKM-ApoB will be provided once this evaluation has been completed.
- Tekmira’s preclinical pipeline continued to expand over the past year with multiple new targets evaluated in the areas of metabolic disease, oncology, and infectious disease. In addition,

Tekmira continues to publish key data in high quality, peer reviewed scientific journals, in order to support the expansion of collaborative relationships within the broader RNAi industry.

Partners' Product Developments

- Tekmira's LNP technology is enabling the entire clinical-stage systemic RNAi product pipeline of Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY). Under an exclusive manufacturing agreement entered into in January 2009, Alnylam obtains their LNP drug product from Tekmira, including the products ALN-VSP, ALN-TTR and ALN-PCS. In January 2011, Alnylam 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.

  Subsequent to year-end, Tekmira filed a complaint against Alnylam for misappropriation and misuse of trade secrets, know-how and other confidential information, unfair and deceptive trade practices, unjust enrichment, unfair competition and false advertising. Tekmira has taken appropriate steps to ensure that it can pursue this lawsuit without interruption to its core business activities and intends to fulfill all of its manufacturing obligations to Alnylam.
- Together with collaborators at The University of Texas Medical Branch, Tekmira was awarded a new United States National Institutes of Health (NIH) grant to support research to develop RNAi therapeutics to treat Ebola and Marburg hemorrhagic fever viral infections using Tekmira's LNP technology. The grant, worth US$2.4 million, will support work at Tekmira and the University of Texas Medical Branch at Galveston, Texas.
- This past year, Tekmira announced the expansion of its research collaboration with Bristol-Myers Squibb (BMS). Under the new agreement, BMS will use siRNA molecules formulated by Tekmira in lipid nanoparticles to silence target genes of interest. BMS will conduct the preclinical work to validate the function of certain genes. Tekmira can use the shared preclinical data to develop RNAi therapeutic products against the therapeutic targets of interest. Work is ongoing to provide a pre-determined number of LNP batches over the span of the four-year agreement.
- Tekmira continues to support its other collaborative industry partners with a focus on LNP evaluation, active targeting and combining new nucleic acids payloads with LNP delivery.

Tekmira concluded the year with $12.3 million in cash through prudent management of expenses and continued recurring revenue from Tekmira's product development partners. Tekmira expects that the current cash on hand will enable execution of its business strategy into 2012.

2010 Financial Results

For the fiscal year ended December 31, 2010, Tekmira's net loss was $12.4 million ($1.20 per common share) as compared to a net loss of $8.7 million ($0.85 per common share) for 2009.

The primary reason for the increase in net losses is increased research, development, collaborations and contracts spending across internal and partnered programs. Also, in 2010, Tekmira incurred professional and listing fees for its Nasdaq listing.

Revenue

Revenue was $21.4 million in 2010 as compared to $14.4 million in 2009.

Alnylam revenue was $6.3 million in 2010 as compared to $8.8 million in 2009. Tekmira's research agreement with Alnylam expired in August 2009. Under an Alnylam Manufacturing Agreement there is a contractual minimum payment for the provision of staff in each of the three years from 2009 to 2011 and Alnylam is reimbursing Tekmira for any external costs incurred. The total payment for the provision of staff from 2009 to 2011 is a minimum of $11.2 million.

In both 2010 and 2009 the Company received US$0.5 million milestone payments from Alnylam following Alnylam's initiation of Phase 1 human clinical trials for two separate products enabled by Tekmira's LNP delivery technology.

On July 14, 2010, Tekmira signed a contract with the United States Government to advance an RNAi therapeutic utilizing the Company's LNP technology to treat Ebola virus infection. Under the contract Tekmira is being reimbursed for costs incurred, including an allocation of overheads, and is being paid an incentive fee. Tekmira recorded $3.6 million in revenue from this contract in 2010.

Tekmira recorded $4.5 million in revenue from Roche in 2010 as compared to $4.8 million in 2009. Under the Roche Product Development Agreement dated May 2009 Roche is paying Tekmira for the provision of staff and for certain external costs incurred. In November 2010, Roche announced that, as part of a corporate restructuring, they intend to discontinue research and development in the field of RNAi.

In Q3 2010 the Company received a $5.9 million license fee amendment payment from Talon Therapeutics, Inc. (formerly Hana Biosciences, Inc.) which was subsequently paid on to contingent creditors. The $5.9 million that flowed through the Company was recorded as revenue and as an expense.

In May 2010 Tekmira signed a formulation agreement with BMS under which BMS paid $3.2 million (US$3.0 million) to make a certain number of LNP formulations over the next four years. Revenue from this agreement will be recognized as batches are produced.

Research, development, collaborations and contracts expenses

Research, development, collaborations and contracts expenses increased to $22.1 million in 2010 as compared to $17.8 million in 2009.

In July 2010 Tekmira signed a contract with the U.S. Government to develop TKM-Ebola and incurred significant program costs such as materials and preclinical studies that have been included in research, development, collaborations and contracts expenses. These costs are being reimbursed by the U.S. Government who is also paying for TKM-Ebola related labour costs and overheads as well as an incentive fee.

In 2010 the Company also incurred more reimbursable costs on its Alnylam collaboration as compared to 2009. Overall costs incurred on TKM-PLK1, TKM-ApoB and other research and formulation development are at similar levels in 2010 as compared to 2009.

Research, development, collaborations and contracts compensation expenses increased in 2010 as compared to 2009. This was due to increasing staff numbers and an increase in stock option expense in 2010. Research and development staff numbers increased to 82 at December 31, 2010 (total staff 92) as compared to 64 (total staff 78) at December 31, 2009.

General and administrative expenses

General and administrative expenses increased to $4.8 million in 2010 from $4.2 million in 2009. The increase in 2010 generally relates to professional and listing fees for Tekmira's Nasdaq share listing.

2011 financial guidance

At December 31, 2010, Tekmira had cash and cash equivalents of approximately $12.3 million.

Total collaborations and contracts revenues are expected to be higher in 2011 than 2010 levels. The reduction in Roche revenue is expected to be replaced by increased revenue from the TKM-Ebola contract and formulations made for BMS.

Total research, development, collaborations and contracts expenses are expected to increase in 2011 over the 2010 level as the Company incurs more third party costs on the TKM-Ebola contract.

Total general and administrative expenses are expected to increase in 2011 over 2010 levels but will be dependent on expenses associated with the lawsuit against Alnylam.

The Company believes that current funds on hand plus expected income including funds from collaborative partners and the U.S. Government will be sufficient to continue product development into 2012 (see Forward-Looking Statements).

Conference Call Information

Tekmira will hold a conference call and webcast to discuss the 2010 audited operating results and provide a corporate update on Wednesday, March 30, 2011 at 9:00 am Pacific Time (12:00 noon Eastern Time). To participate in the conference call, please dial 914-495-8556 or 1-866-393-1607. The live webcast can be accessed through the Investor section of Tekmira's website at www.tekmirapharm.com. An archived webcast will be available on the Tekmira website approximately two hours after the event. In addition, a replay of the conference call will be available until April 8, 2011 by calling 706-645-9291 or 1-800-642-1687 and referencing conference ID code 54974877.

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.

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; estimates of the number of clinical development programs to be undertaken by Tekmira and its product development partners; selection of additional product candidates; timing of release of clinical data; the quantum and timing of potential funding; use of lipid nanoparticle (LNP) technology by Tekmira’s licensees (we have previously referred to our LNP technology as SNALP for Stable Nucleic Acid Lipid Particles); the effects of Tekmira’s products on the treatment of elevated low-density lipoprotein (LDL) cholesterol, cancer and infectious disease; Tekmira’s expectations with respect to existing and future agreements with third parties; estimates that the reduction in Roche revenue to be replaced by increased revenue from the TKM-Ebola contract and formulations made for BMS; statements about the nature, prospects and anticipated timing to resolve the complaint filed by Tekmira against Alnylam; the nature, scope and quantum of damages sought by Tekmira from Alnylam; measures taken to ensure that Tekmira can pursue the litigation with Alnylam without interruption to Tekmira’s core business activities; estimates and scope of Tekmira’s financial guidance and expected cash runway in light of the litigation with Alnylam; and estimates of the length of time Tekmira’s business will be funded by its anticipated financial resources.

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 high LDL cholesterol, cancer and infectious disease; the developmental milestones and approvals required to trigger funding for TKM-Ebola from the Transformational Medical Technologies program; results in non-human primates are indicative of the potential effect in humans; Tekmira’s research and development capabilities and resources; FDA approval with respect to commencing clinical trials; FDA approval of Tekmira’s products; 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 collaborative partners including the U.S. Government and the manufacturing agreement with Alnylam; the nature and prospects of the litigation with Alnylam; based on the conduct of Alnylam, the nature, scope and quantum of damages that Tekmira is entitled to; costs and timing of the litigation with Alnylam and the effects of such on Tekmira’s financial position and execution of Tekmira’s business strategy; the sufficiency of budgeted capital expenditures in carrying out planned activities; Tekmira’s ability to protect its intellectual property rights and not to infringe on the intellectual property rights of others; the ability to succeed at establishing a successful commercialization program for any of Tekmira’s products; and the availability and cost of labour and services. 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 and generally, difficulties or delays in the progress, timing and results of clinical trials and studies; 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; future operating results are uncertain and likely to fluctuate; Tekmira may not be able to develop and obtain regulatory approval for its products; competition from

other pharmaceutical or biotechnology companies; Tekmira's ability 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'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 development partners and licensees conducting clinical trial 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 and Alnylam will not be received by Tekmira on a timely basis, or at all, or in the quantum expected by Tekmira; pre-clinical trials may not be completed, or clinical trials started, when anticipated or at all; 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; Tekmira may become subject to product liability or other legal claims for which the Company has made no accrual in its financial statements; the reduction in Roche revenue may not be replaced in the quantity anticipated or at all; the final outcome of the litigation with Alnylam is not presently determinable or estimable and may result in an outcome that is unfavorable to Tekmira; there may be no basis for which Tekmira has any rights or entitlement to damages from Alnylam in the quantum anticipated by Tekmira, or at all; legal expenses associated with litigation are uncertain and may exceed current estimates, which may have a material adverse effect on Tekmira's financial position and ongoing business strategy; the uncertainty of litigation, including the time and expenses associated therewith; risks and uncertainties involved in the litigation process, such as discovery of new evidence or acceptance of unanticipated or novel legal theories, changes in interpretation of the law due to decisions in other cases, the inherent difficulty in predicting the decisions of judges and juries and the possibility of appeals; 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 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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