SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

Tekmira Pharmaceuticals Corporation

(Exact Name of Registrant as Specified in Its Charter)

British Columbia (State of Incorporation or Organization)

100-8900 Glenlyon Parkway Burnaby, British Columbia, Canada (Address of Principal Executive Offices) 980597776 (IRS Employer Identification No.)

> V5J 5J8 (Zip Code)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box.

Securities Act registration statement file number to which this form relates: 333-169311.

Securities to be registered pursuant to Section 12(b) of the Act:

Title Of Each Class To Be So Registered Common Shares, without par value Name Of Each Exchange On Which Each Class Is To Be Registered The NASDAQ Stock Market LLC

Securities to be registered pursuant to Section 12(g) of the Act:

N/A (Title of Class)

N/A (Title of Class)

Item 1. Description of Registrant's Securities to be Registered.

The description of the common shares of the Registrant set forth under the heading "Description of Share Capital, Common Shares and Related Information" in the prospectus included in the Registrant's registration statement on Form F-10 (File No. 333-169311) as initially filed with the Securities and Exchange Commission on September 10, 2010 (the "Registration Statement"), as subsequently amended by any amendments to such Registration Statement, is incorporated herein by reference.

Item 2. Exhibits.

Not applicable.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: November 4, 2010

Tekmira Pharmaceuticals, Inc.

By:

/s/ IAN C. MORTIMER

Ian C. Mortimer Executive Vice President, Finance and Chief Financial Officer