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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported):

November 3, 2010

ADVENTRX Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware

001-32157

84-1318182

(State or other jurisdiction
of incorporation)

(Commission
File Number)

(I.R.S. Employer
Identification No.)

6725 Mesa Ridge Road, Suite 100, San Diego,
California

92121

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code:

858-552-0866

Not Applicable

Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 8.01 Other Events.

On November 3, 2010, ADVENTRX Pharmaceuticals, Inc. issued a press release announcing that it has submitted a New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA) for its product candidate ANX-530 (vinorelbine injectable emulsion), or Exelbine(TM). The press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

The list of exhibits called for by this Item is incorporated by reference to the Exhibit Index filed with this report.

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 hereunto duly authorized.

ADVENTRX Pharmaceuticals, Inc.

November 3, 2010

By: */s/ Patrick L. Keran*

Name: Patrick L. Keran

Title: President and Chief Operating Officer

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press release, dated November 3, 2010



ADVENTRX SUBMITS EXELBINE™ NEW DRUG APPLICATION

SAN DIEGO (November 3, 2010) – ADVENTRX Pharmaceuticals, Inc. (NYSE Amex: ANX) announced today that it has submitted a New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA) for its product candidate ANX-530 (vinorelbine injectable emulsion), or Exelbine.

“Our Exelbine submission includes twelve months of site-specific stability data from our intended commercial manufacturer, which fulfills a request communicated to us by the FDA earlier this year. We believe this submission will be accepted for review in early 2011 and we look forward to working with the Agency toward our first product approval,” said Brian M. Culley, Chief Executive Officer of ADVENTRX.

ADVENTRX retains exclusive worldwide rights to Exelbine, other than in China, Hong Kong, Macau and Taiwan. In March 2010, the FDA conditionally accepted “Exelbine” as the proposed proprietary name for ANX-530. In October 2010, patent claims related to Exelbine were allowed by the United States Patent and Trademark Office. These patent claims, when issued, will extend into 2024.

ADVENTRX is seeking approval of Exelbine for the same indications as Navelbine®, a branded formulation of vinorelbine, including non-small cell lung cancer. ADVENTRX submitted the NDA as a 505(b)(2) application that relies in part on the FDA’s findings of safety and effectiveness of a reference drug. The Company’s 505(b)(2) NDA submission includes data from one clinical bioequivalence study designed to assess the pharmacokinetic equivalence of Exelbine and Navelbine, the reference drug. In this clinical bioequivalence study, Exelbine and the reference drug were determined by ADVENTRX to be bioequivalent.

About ADVENTRX Pharmaceuticals

ADVENTRX Pharmaceuticals is a specialty pharmaceutical company whose product candidates are being developed to improve the performance of existing anti-cancer drugs by addressing limitations associated principally with their safety and use. More information can be found on the Company’s web site at www.adventrx.com.

Forward Looking Statements

ADVENTRX cautions you that statements included in this press release that are not a description of historical facts are forward-looking statements that are based on ADVENTRX’s current expectations and assumptions. Such forward-looking statements include, but are not limited to, statements regarding FDA acceptance of the Exelbine NDA for review, approval of Exelbine based on that 505(b)(2) NDA submission and patent protection for Exelbine. Actual events or results may differ materially from those expressed or implied by the forward-looking statements in this press release due to a number of risks and uncertainties, including, without limitation: the risk that the FDA does not accept the Exelbine NDA for review, including as a result of identifying clinical or nonclinical reasons for a refusal-to-file or identifying CMC reasons that were not identified in the refusal-to-file of the previously submitted Exelbine NDA; the potential that the bioequivalence data and other information included in the Exelbine NDA may not adequately support bioequivalence with Navelbine, including as a result of performing pharmacokinetic equivalence analyses based on a patient population other than the population on which ADVENTRX based its analysis; the potential that changes made in transferring the manufacturing process for Exelbine may result in a lack of comparability between the commercial product and the material used in the bioequivalence trial; the risk that results of future stability testing on samples of Exelbine do not support comparability between ADVENTRX’s prior and intended commercial manufacturing sites or a commercially-viable expiration dating period; the potential for the FDA to impose other requirements to be completed before or after approval of the Exelbine NDA, including that the FDA may require ADVENTRX to perform additional nonclinical, bioequivalence or clinical studies; ADVENTRX’s reliance on third parties to assist with its bioequivalence trials, regulatory submissions, manufacturing and other important aspects of the Exelbine development program, and the risk that FDA approval may be delayed if their performance is found to have been substandard; the possibility that a patent issued based on ADVENTRX’s U.S. patent application entitled “Compositions for Delivering Highly Water Soluble Drugs” will not provide sufficient protection and market exclusivity for Exelbine; the risk that any patent issued to ADVENTRX may be challenged, invalidated, infringed or circumvented by third parties, including by ADVENTRX’s competitors; the risk that ADVENTRX does not receive FDA approval of Exelbine on a timely basis, or at all; ADVENTRX’s dependence on the success of Exelbine as its first product candidate to be submitted for regulatory approval; the potential that ADVENTRX may require substantial additional funding in order to obtain FDA approval for and commercialize Exelbine, and the risk that ADVENTRX may not be able to raise sufficient capital when needed, or at all; the potential for ADVENTRX to enter into a commercial partnership or other strategic transaction relating to Exelbine and that such partnership or transaction may not succeed in commercializing Exelbine; and other risks and uncertainties more fully described in ADVENTRX’s press releases and periodic filings with the Securities and Exchange Commission. ADVENTRX’s public filings with the Securities and Exchange Commission are available at www.sec.gov.

You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date when made. ADVENTRX does not intend to revise or update any forward-looking statement set forth in this press release to reflect events or circumstances arising after the date hereof, except as may be required by law.

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