
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) April 3, 2006

ADVENTRX Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

001-32157

(Commission File Number)

84-1318182

(IRS Employer Identification No.)

6725 Mesa Ridge Road, Suite 100

San Diego, California 92121

(Address of principal executive offices) (Zip Code)

(858) 552-0866

(Company's telephone number, including area code)

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 April 3, 2006, the Company announced that positive preclinical testing results showing strong antiviral synergy without added cytotoxicity with combinations of Thiovir™ and zidovudine (AZT) were presented at the HIV Pathogenesis Meeting in Keystone, Colorado on March 31, 2006.

On April 5, 2006, the Company announced that it presented preclinical study results showing an improved toxicity profile for its oncology compound, ANX-530 (vinorelbine emulsion) at the American Association for Cancer Research (AACR) 97th Annual Meeting 2006 on April 5, 2006.

The press releases issued by the Company on April 3 & 5, 2006 with respect to these matters are included with this report as exhibits.

Item 9.01. Financial Statements and Exhibits.

(99) (c) The exhibit list required by this item is incorporated by reference to the Exhibit Index filed as part of 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.

By: /s/ Carrie E. Carlander

Name: Carrie E. Carlander
Title: Chief Financial Officer,
Senior Vice President Finance,
Secretary and Treasurer

April 6, 2006

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description</u>
99.1	Press Release of the Company dated April 3, 2006.
99.2	Press Release of the Company dated April 5, 2006.

ADVENTRX PRESENTS POSITIVE THIOVIR PRECLINICAL RESULTS

SAN DIEGO – April 3, 2006 – ADVENTRX Pharmaceuticals, Inc. (Amex: ANX) announced today that data were presented showing strong antiviral synergy without added cytotoxicity with combinations of Thiovir™ and zidovudine (AZT) in a series of in vitro tests serving as models for human immunodeficiency virus (HIV) infection. The data were presented on Friday, March 31 at the HIV Pathogenesis Meeting, in Keystone, Colorado. The abstract entitled “Synergistic antiviral activity and additive cytotoxicity of Thiovir combined with zidovudine” was presented by Shani Waninger, Ph.D., associate director of research and development for ADVENTRX. Thiovir is a broad spectrum antiviral and oral prodrug for foscarnet, a drug approved to treat opportunistic infections in HIV/AIDS patients. Thiovir is being developed as a reverse transcriptase inhibitor to be used as a component of highly active antiretroviral therapy (HAART) for HIV/AIDS and as a potential antiviral therapy for avian flu.

Results were presented from in vitro tests that revealed various combinations of Thiovir and zidovudine showed strong synergistic antiviral activity. This antiviral synergy between Thiovir and zidovudine was significantly more pronounced than antiviral activity of combinations of foscarnet and zidovudine, which were found to be only slightly synergistic to antagonistic. Furthermore, combinations of Thiovir and zidovudine showed less cytotoxicity than combinations of foscarnet and zidovudine, suggesting a safer toxicity profile of the Thiovir and zidovudine combination. Together, these results imply that Thiovir and zidovudine would be compatible as part of an antiviral therapy. Copies of the poster presentation will be available in the “Resources” section of the Company’s Web site at <http://www.adventrx.com/library/publications.htm>.

“The strong antiviral activity demonstrated by combinations of Thiovir and zidovudine is intriguing since it suggests that lower dosages of each drug may be required when they are administered together to achieve a level of viral inhibition,” said Joan M. Robbins, Ph.D., ADVENTRX chief scientific officer and executive vice president. “Furthermore, according to these preliminary results, combinations of Thiovir and zidovudine do not increase the toxicity greater than the sum of the toxicity from each of the drugs, which could have important clinical implications from a drug tolerability standpoint.”

ADVENTRX currently plans to file an investigational new drug application (IND) with the US Food and Drug Administration (FDA) in the first half of 2006 in order to conduct a Phase I/II clinical trial using Thiovir to treat HIV/AIDS. In addition, the Company is investigating Thiovir as a potential treatment for avian influenza and is currently exploring international regulatory strategies. The Company recently announced that Thiovir was active against an H5N1 hybrid influenza strain.

About Thiovir

Thiovir is a broad spectrum antiviral drug that has been shown in preclinical tests to inhibit HIV, influenza A and herpes viruses. Thiovir is a pyrophosphate analogue and reverse transcriptase inhibitor designed for oral delivery as a component of highly active antiretroviral therapy (HAART) for HIV/AIDS. Thiovir is a prodrug for foscarnet that delivers both the active drug TPFA (thiophosphonoformate) and the active metabolite PFA (foscarnet).

About ADVENTRX

ADVENTRX Pharmaceuticals is a biopharmaceutical research and development company focused on introducing new technologies for anticancer and antiviral treatments that surpass the performance and safety of existing drugs, by addressing significant problems such as drug metabolism, toxicity, bioavailability and resistance. More information can be found on the Company’s Web site at www.adventrx.com.

Forward Looking Statement

This press release contains forward-looking statements, within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, regarding ADVENTRX. Such statements are made based on management’s current expectations and beliefs. Actual results may vary from those currently anticipated based upon a number of factors, including uncertainties inherent in the drug development process, the timing and success of clinical trials, the validity of research results, and the receipt of necessary approvals from the FDA and other regulatory agencies. For a discussion of such risks and uncertainties, which could cause actual results to differ from those contained in the forward-looking statements regarding ADVENTRX, see the section titled “Risk Factors” in ADVENTRX’s last annual report on Form 10-K, as well as other reports that ADVENTRX files from time to time with the Securities and Exchange Commission. All forward-looking statements regarding ADVENTRX are qualified in their entirety by this cautionary statement. ADVENTRX undertakes no obligation to release publicly any revisions, which may be made to reflect events or circumstances after the date hereof.

ADVENTRX Presents Positive ANX-530 Preclinical Results

SAN DIEGO — April 5, 2006 — ADVENTRX Pharmaceuticals, Inc. (Amex: ANX) announced today that it presented preclinical study results showing an improved toxicity profile for its oncology compound, ANX-530 (vinorelbine emulsion), an emulsion formulation of the FDA-approved drug vinorelbine tartrate. The study results suggest lower venous toxicity of the emulsion formulation compared to the FDA-approved drug, vinorelbine solution, while maintaining similar antitumor activity and pharmacokinetics. The presentation, entitled “A novel emulsion formulation of vinorelbine attenuates venous toxicity while maintaining antitumor efficacy” was presented at the American Association for Cancer Research (AACR) 97th Annual Meeting 2006 on Wednesday, April 5 by Mark J. Cantwell, Ph.D., vice president of research and development for ADVENTRX. ANX-530 is a new formulation of vinorelbine that is designed to protect the venous endothelium during administration, therefore reducing vein irritation, a common side-effect seen with the approved drug.

Vein toxicity, edema and erythema were examined in rabbits following repeated intravenous (IV) injections in the marginal ear vein. For all toxicity parameters tested, animals dosed with ANX-530 showed less toxicity than those dosed with vinorelbine solution. In addition, while all animals in the ANX-530 groups received the full set of repeated injections, animals in the vinorelbine solution group did not receive all the planned injections due to the severity of toxicity. Moreover, tissue distribution following drug administration was assessed and showed significantly less drug accumulation in brain tissue in the ANX-530 group compared with the vinorelbine solution group, suggesting the potential for lower neurotoxicity. Despite the toxicity differences, drug pharmacokinetics in rodent plasma, and antitumor activity in animals transplanted with human lung and breast tumor xenografts, was similar for both drugs. Copies of the poster presentation are available in the “Resources” section of the Company’s Web site at <http://www.adventrx.com/library/publications.htm>.

“These preclinical findings for ANX-530 are encouraging since vein irritation is an important factor in patient comfort. If similar results are shown clinically, we believe there is potential for more widespread use of this active chemotherapy,” said Joan M. Robbins, Ph.D., ADVENTRX chief scientific officer and executive vice president. “We intend to study vein irritation in the clinic during the bioequivalency trial with ANX-530 which is planned to begin in the fourth quarter of this year.”

About ANX-530

ANX-530 is a novel emulsion formulation of vinorelbine tartrate. Vinorelbine is a chemotherapeutic agent indicated as a single agent or in combination with cisplatin for treatment of advanced non-small cell lung cancer (NSCLC). The Company plans to conduct a single bioequivalency study of ANX-530 as a marketing-enabling clinical trial, a plan that was recently affirmed by the FDA.

The Company currently plans to file an IND application in the third quarter of 2006. The proposed clinical trial will compare the bioequivalency of ANX-530 with that of vinorelbine in patients with advanced solid tumors. In addition, the Company plans to collect comparative data on vein irritation and other safety parameters as secondary endpoints.

About ADVENTRX

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