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): June 2, 2008

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))

Top of the Form

Item 8.01 Other Events.

On June 3, 2008, ADVENTRX Pharmaceuticals, Inc. (the "Company") issued a press release announcing objective response rate and available safety data from the Company's Phase 2 clinical study of ANX-510, or CoFactor®, for the treatment of advanced breast cancer. 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.

Forward-Looking Statements

Certain statements in this Form 8-K and the attached press release are forward-looking statements that involve a number of risks and uncertainties. Such forward-looking statements include statements about the efficacy and safety of ANX-510. Actual events or results may differ materially from the Company's expectations. Factors that could cause actual results to differ materially from the forward-looking statements include, but are not limited to: the potential for ADVENTRX's product candidates to receive regulatory approval for one or more indications on a timely basis or at all, and the uncertain process of seeking regulatory approval; difficulties or delays in developing, testing, manufacturing and marketing of and obtaining regulatory approval for ADVENTRX's product candidates; the market potential for ADVENTRX's product candidates and ADVENTRX's and any future partners' abi lity to compete in those markets; unexpected adverse side effects or inadequate therapeutic efficacy of ADVENTRX's product candidates that could delay or prevent regulatory approval or commercialization; the risk that preclinical and clinical results are not indicative of the success of subsequent clinical trials and that products will not perform as preclinical and clinical data suggests or as otherwise anticipated; the risk that ADVENTRX will be unable to raise sufficient capital to fund the projects necessary to meet its anticipated or stated goals and milestones; 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 http://www.sec.gov.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date when made. ADVENTRX does not intend to revise o r update any forward-looking statement set forth in this Form 8-K or the attached press release to reflect events or circumstances arising after the date on which it was made.

Top of the Form

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.

June 3, 2008

By: /s/ Patrick L. Keran

Name: Patrick L. Keran
Title: Vice President, Legal

Top of the Form

Exhibit Index

Exhibit No.	Description
99.1	Press release, dated June 3, 2008

ADVENTRX PRESENTS COFACTOR DATA AT THE 2008 ANNUAL MEETING OF THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY (ASCO)

SAN DIEGO – June 3, 2008 – ADVENTRX Pharmaceuticals, Inc. (Amex: ANX) announced today that it presented objective response rate and available safety data from the Company's Phase 2 clinical study of ANX-510, or CoFactor®, for the treatment of advanced breast cancer at the 2008 American Society of Clinical Oncology (ASCO) Annual Meeting, which takes place May 30 – June 3, 2008 in Chicago, IL. CoFactor plus 5-FU (5-Fluorouracil) was determined to be a safe, well-tolerated and active treatment regimen in advanced breast cancer patients who are Herceptin receptor (Her2/neu) negative and who have failed prior taxane and anthracycline therapies. Data available from 31 patients indicated a 23% objective response rate with CoFactor plus 5-FU based on investigators' assessments. Objective response rate was based on the number of complete responses and partial responses observed in this study.

The poster presentation, entitled "5,10 methylenetetrahydrofolic acid with 5-fluorouracil as treatment for advanced breast cancer in patients who failed prior treatment with anthracyclines and taxanes: A phase 2 study," was presented by Dr. Joachim P.H. Schupp, Vice President of Medical Affairs on June 2, 2008.

Historically, capecitabine (Xeloda®), a widely-used treatment for advanced breast cancer, has demonstrated response rates between 14% and 26% when studied as monotherapy in patients with advanced breast cancer who failed prior treatment with anthracyclines and taxanes. In this well-defined study population, two recently published, Phase 3 clinical trials, where capecitabine was the approved therapy, demonstrated response rates of 14% for capecitabine alone compared with 35% for capecitabine in combination with ixabepilone or 22% for capecitabine in combination with lapatinib.

"This CoFactor data is encouraging to us as it surpasses the most recently reported response rates with capecitabine in pretreated advanced breast cancer patients. CoFactor plus 5-FU could be an effective and safe treatment option for patients with pretreated advanced breast cancer with the potential for further improvements to be shown with appropriate combination therapies," stated Evan M. Levine, Chief Executive Officer and President of ADVENTRX. "We look forward to evaluating all of the available data from the rest of our CoFactor program, and following analysis of these data we should have greater insight into the value of continuing to develop CoFactor," added Mr. Levine.

The most common adverse events in this study were expected and included the following, which reflects all grades: asthenia (52%), nausea (33%), diarrhea (29%), vomiting (26%), anorexia (23%), dyspnea (23%), and neutropenia (23%). Five patients reported 12 serious adverse events (pneumonia, abdominal pain, diarrhea (2), general physical health deterioration (3), pancytopenia, breast pain, dyspnea, asthenia, and hypersensitivity). Patients in this study will continue to be followed for other efficacy and safety parameters.

The Company's Phase 2 clinical trial was a single arm, multicenter study designed to evaluate the safety and efficacy of treatment with CoFactor/5-FU utilizing a bolus administration in patients with advanced breast cancer who have failed anthracycline and taxane chemotherapies with clearly defined criteria. The primary endpoint for the study is assessing objective response rate as defined by Response Evaluation Criteria in Solid Tumors (RECIST) criteria. RECIST criteria is a series of formalized rules for the measurement of tumor target lesions and involves techniques which measure tumor response using X-rays, CT and MRI scans. Objective response rate is measured by combining the number of complete responses and partial responses. According to RECIST criteria, a complete response (CR) indicates the disappearance of all target lesions and a partial response (PR) indicates a 30% decrease in the sum of the longest diameter of target lesions. A total of 32 patients were enrolled in this study and 31 patients received at least one dose of drug. A treatment cycle consisted of 60 mg/m^2 of CoFactor plus 500 mg/m^2 of 5-FU, weekly i.v. (intra-venous) for a period of 6 weeks, repeated every 8 weeks. CoFactor was administered at a dose of 60 mg/m^2 as an i.v. bolus over 2-3 minutes. Administration of CoFactor was followed 20 minutes later by 500 mg/m^2 of 5-FU as an i.v. bolus over 2-3 minutes.

About ANX-510, or CoFactor
CoFactor is a folate-based biomodulator designed to replace leucovorin as the preferred method to enhance the activity and reduce associated toxicity of the widely used cancer chemotherapeutic agent 5-FU (5-fluorouracil). Compared to leucovorin, CoFactor creates more stable binding between the active form of 5-FU and the target enzyme, thymidylate synthase. CoFactor bypasses the metabolic pathway required by leucovorin to deliver the active form of folate, potentially allowing 5-FU to work more effectively.

About ADVENTRX Pharmaceuticals
ADVENTRX Pharmaceuticals is a biopharmaceutical company focused on in-licensing, developing and commercializing proprietary product candidates primarily for the treatment of cancer and infectious disease. The Company seeks to improve the performance and commercial potential of existing treatments by addressing problems associated with these treatment regimens. More information can be found on ADVENTRX'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 involve risks and assumptions that, if they materialize or do not prove to be accurate, could cause ADVENTRX's results to differ materially from historical results or those expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: the potential for ADVENTRX's product candidates to receive regulatory approval for one or more indications on a timely basis or at all, and the uncertain process of seeking regulatory approval; difficulties or delays in developing, testing, manufacturing and marketing of and obtaining regulatory approval for ADVENTRX's product candidates; the market potential for ADVENTRX's product candidates and ADVENTRX's and any future partners' ability to compete in those markets; unexpected adverse side effects or inadequate therapeutic efficacy of ADVENTRX's product candidates that could delay or prevent regulatory approval or commercialization; the risk that preclinical and clinical results are not indicative of the success of subsequent clinical trials and that products will not perform as preclinical and clinical data suggests or as otherwise anticipated; the risk that ADVENTRX will be unable to raise sufficient capital to fund the projects necessary to meet its anticipated or stated goals and milestones; 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 http://www.sec.gov.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date when made. ADVENTRX does not intend to update any forward-looking statement set forth in this press release to reflect events or circumstances arising after the date on which it was made.

Investor Contact:
ADVENTRX Pharmaceuticals
Ioana C. Hone
858-552-0866

###