
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):

July 1, 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))
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Item 8.01 Other Events.

On July 1, 2008, ADVENTRX Pharmaceuticals, Inc. issued a press release providing an update on its ANX-510, or CoFactor®, program. 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 risk that ADVENTRX does not continue the development of CoFactor, including based on the pharmacokinetic results from ADVENTRX's pharmacokinetic bridging study, progression-free and overall survival, as well as final safety, results from ADVENTRX's discontinued Phase 3 study or revisions to previously announced CoFactor results; the Company's inability to identify and secure approval from applicable regulatory authorities for an appropriate, cost-effective development path for CoFactor; the risk that ADVENTRX will be unable to raise sufficient capital to fund the continued development of CoFactor or the Company's other product candidates; the potential to attract a strategic partner for the Company's product candidates and the terms of any related transaction; 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; unexpected or a greater than expected number of expected adverse side effects or inadequate therapeutic efficacy of CoFactor, regardless of administration method, or ADVENTRX's other product candidates; 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; 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 or 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.

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.

July 1, 2008

By: */s/ Patrick L. Keran*

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

Exhibit Index

Exhibit No.	Description
99.1	Press release, dated July 1, 2008

ADVENTRX ANNOUNCES PRELIMINARY RESPONSE RATE DATA FROM DISCONTINUED PHASE 3 TRIAL OF COFACTOR®

SAN DIEGO – July 01, 2008 – ADVENTRX Pharmaceuticals, Inc. (Amex: ANX) today announced preliminary response rate results from its discontinued Phase 3 clinical trial of ANX-510, or CoFactor, the Company's folate-based biomodulator of 5-FU (5 fluorouracil), for the treatment of first-line metastatic colorectal cancer. The primary endpoint of the study was progression-free survival, which is expected to mature and be reported by the Company along with safety data later this year.

Data from the 85 patients treated in the study demonstrated a 39.0% objective response rate in the CoFactor/5-FU/Avastin® experimental arm compared to a 31.8% objective response rate in the leucovorin/5-FU/Avastin control arm. The data also demonstrated a 48.8% stable disease rate and 4.8% progressive disease rate in the CoFactor experimental arm compared to a 38.6% stable disease rate and 15.9% progressive disease rate in the leucovorin control arm. Objective response rate was measured according to RECIST criteria and was based on the number of complete responses and partial responses observed in this study based on investigators' assessments. In the study, both CoFactor and 5-FU were administered as an i.v. bolus. Currently, there are 10 patients receiving treatment in this study, with 6 patients on the CoFactor experimental arm and 4 patients on the leucovorin control arm.

Based on the data available at this time, the Company intends to evaluate potential options for the continued development of CoFactor. As the Company makes progress it anticipates providing updates regarding its development plans for CoFactor.

"As we evaluate further safety and efficacy data from our Phase 3 trial and the results of our pharmacokinetic bridging study, we expect to assess our options for continued development of CoFactor, including potentially reinitiating discussions with regulatory authorities," stated Evan M. Levine, Chief Executive Officer and President of ADVENTRX. "Given our encouraging progress with ANX-530 and ANX-514, our resources are focused primarily on advancing our later-stage product candidates, which includes submitting an NDA for ANX-530 and completing our registrational bioequivalence clinical study for ANX-514," added Mr. Levine.

About the Discontinued Phase 3 Clinical Study

The Phase 3 clinical trial was a randomized, controlled, multicenter study designed to evaluate the safety and efficacy of CoFactor/5-FU/Avastin and leucovorin/5-FU/Avastin in patients with first-line metastatic colorectal cancer. Eighty-nine patients were randomized to either the leucovorin control arm or the CoFactor experimental arm, with a bolus regimen of 5-FU (the Roswell Park regimen) and Avastin; eighty-five patients were treated. The primary endpoint in this study was an improvement in progression-free survival. Secondary endpoints included response rate, overall survival and incidence and severity of adverse events.

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-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 risk that ADVENTRX does not continue the development of CoFactor, including based on the pharmacokinetic results from ADVENTRX's pharmacokinetic bridging study, progression-free and overall survival, as well as final safety, results from ADVENTRX's discontinued Phase 3 study or revisions to previously announced CoFactor results; the Company's inability to identify and secure approval from applicable regulatory authorities for an appropriate, cost-effective development path for CoFactor; the risk that ADVENTRX will be unable to raise sufficient capital to fund the continued development of CoFactor or the Company's other product candidates; the potential to attract a strategic partner for the Company's product candidates and the terms of any related transaction; 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; unexpected or a greater than expected number of expected adverse side effects or inadequate therapeutic efficacy of CoFactor, regardless of administration method, or ADVENTRX's other product candidates; 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; 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>.

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Investor Contact:

ADVENTRX Pharmaceuticals

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