
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 2, 2007

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 2, 2007, 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 Index to Exhibits 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 2, 2007

By: */s/ Evan M. Levine*

Name: Evan M. Levine

Title: Chief Executive Officer

Exhibit Index

Exhibit No.	Description
99.1	Press release, dated November 2, 2007

ADVENTRX PROVIDES UPDATE ON COFACTOR® PROGRAM

SAN DIEGO – November 2, 2007 – ADVENTRX Pharmaceuticals, Inc. (Amex: ANX), a biopharmaceutical research and development company focused on commercializing proprietary product candidates for the treatment of cancer and infectious diseases, today announced that it will discontinue enrolling patients in its Phase 3 clinical trial of CoFactor for the first-line treatment of metastatic colorectal cancer. This decision follows advice ADVENTRX received from the Data Safety Monitoring Board (DSMB), and comprehensive analysis of the recently completed Phase 2b clinical trial of CoFactor for the treatment of metastatic colorectal cancer. While the DSMB did not identify safety concerns with CoFactor, it recommended closure of the Phase 3 study, citing a slow accrual rate due, in part, to current and projected treatment preferences for colorectal cancer. Further analysis of the Phase 2b study, in which 5-FU was administered by infusion, has uncovered no significant differences between the study arms with regard to either efficacy or safety. Overall survival data from the Phase 2b study and data from the Phase 3 study are anticipated in the second quarter of 2008.

ADVENTRX will continue its on-going Phase 2 clinical trial of CoFactor for the treatment of advanced breast cancer, in which 5-FU is administered as a bolus, and anticipates completing patient enrollment around the end of the year. Results from this trial are expected in the second quarter of 2008.

“We continue to believe that CoFactor improves 5-FU-based chemotherapy and that, in the right indications and dosing regimens, CoFactor remains a viable product candidate. At this time, however, we feel that a partner for CoFactor would be better equipped to advance late stage development in first-line colorectal cancer, which represents the largest market opportunity but also the most costly and competitive clinical testing environment,” commented Evan Levine, chief executive officer of ADVENTRX. “We are continuing our Phase 2 study in advanced breast cancer and will assess our ability to develop CoFactor in this and other indications. We would like to take the opportunity to thank the patients and their families, as well as the clinical investigators and their staff, who participated in and supported our Phase 3 study of CoFactor.”

“We remain committed to maximizing shareholder value. We are excited about several upcoming events, including results from our marketing-enabling study of ANX-530, as well as initiating a clinical study of ANX-514 before the end of this year,” added Mr. Levine.

About ANX-510, or CoFactor

CoFactor is a folate-based biomodulator drug 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 of the active form of 5-FU to the target enzyme, thymidylate synthase (TS). CoFactor bypasses the metabolic pathway required by leucovorin to deliver the active form of folate, potentially allowing 5-FU to work more effectively. CoFactor is in a Phase 2 clinical trial for the treatment of advanced breast cancer. In October 2007, ADVENTRX announced the results from its Phase 2b clinical trial of CoFactor for the treatment of metastatic colorectal cancer. The CoFactor/5-FU arm did not demonstrate statistically significant improved safety in the trial’s primary endpoint, a reduction in the proportion of patients reporting at least one hematological or gastrointestinal adverse event of grade 3 or greater. In addition, no statistically significant differences between the arms were observed across overall safety and efficacy variables.

About ADVENTRX Pharmaceuticals

ADVENTRX Pharmaceuticals is a biopharmaceutical research and development company focused on commercializing proprietary product candidates for the treatment of cancer and infectious diseases.

The Company seeks to improve the performance and safety of existing treatments by addressing significant problems, such as drug metabolism and bioavailability, excessive toxicity and treatment resistance. 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 will be unable to partner its product candidates and the terms of any related transaction; the ability to timely enroll subjects in ADVENTRX’s current and anticipated clinical trials; the results of pending clinical trials; 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, including receiving necessary regulatory approvals for clinical trials of ANX-514, in a timely manner or at all; the potential for automatic injunctions under the Section 505(b)(2) regulatory process and other challenges by patent holders during that process; other 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, or that could result in recalls or product liability claims; the FDA’s views on the appropriateness of seeking marketing approval of ANX-530 and ANX-514 under Section 505(b)(2); 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.

Contact:

Investors – ADVENTRX Pharmaceuticals, Inc.

Ioana C. Hone
858-552-0866

