
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):

May 18, 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 1.02 Termination of a Material Definitive Agreement.

On May 18, 2007, ADVENTRX Pharmaceuticals, Inc. (the "Company") received a letter from TRx Pharma, a subsidiary of Theragenex, LLC. The Company believes the letter was intended to constitute notice of termination of that certain License Agreement, dated October 20, 2006 (the "License Agreement"), between the Company and Theragenex, LLC ("Theragenex") pursuant to Section 9.2(c) of the License Agreement, though the letter did not explicitly state that it constituted notice of termination and was not clear as to the provision of the License Agreement under which the letter was provided.

Under the License Agreement, the Company granted to Theragenex an exclusive license to develop, make, have made, use, sell, offer for sale and import ANX-211 in the United States in exchange for, among other things, a licensing fee of \$1.0 million (\$500,000 of which the Company received in January 2007, with the remainder due in June 2007). A complete copy of the License Agreement is filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the U.S. Securities and Exchange Commission (the "SEC") on October 23, 2006 and the foregoing description of the License Agreement is qualified in its entirety by the agreement as filed with the SEC.

In its letter, TRx Pharma provided several reasons for seeking to terminate the License Agreement, the accuracy and reasonableness of many of which the Company questions. In addition, TRx Pharma requested a refund of its initial \$500,000 payment and, in subsequent discussions, has indicated it does not intend to pay the remaining \$500,000.

The Company disputes the right of Theragenex and TRx Pharma to terminate the License Agreement, whether pursuant to Section 9.2(c) or otherwise. The Company intends to enforce its rights under the License Agreement, including rights to receive payment of the remaining \$500,000 due in June 2007, and will pursue such other remedies as it determines are appropriate.

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.

May 24, 2007

By: */s/ Evan M. Levine*

Name: Evan M. Levine
Title: Chief Executive Officer