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 7, 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 2.02 Results of Operations and Financial Condition.

On May 7, 2007, ADVENTRX Pharmaceuticals, Inc. issued a press release announcing its financial results for the three-month period ended March 31, 2007. A copy of this press release is furnished as Exhibit 99.1 hereto

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.

The information set forth under Item 2.02 and in Exhibit 99.1 is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and is not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

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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 7, 2007

By: /s/ Evan M. Levine

Name: Evan M. Levine
Title: Chief Executive Officer

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Exhibit No.	Description
99.1	Press Release, dated May 7, 2007

ADVENTRX PHARMACEUTICALS REPORTS FIRST QUARTER 2007 FINANCIAL RESULTS

Conference call scheduled for 1:30 p.m. (Pacific); simultaneous webcast at www.adventrx.com

SAN DIEGO, May 7, 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 financial results for the three months ended March 31, 2007. ADVENTRX's net loss was $5.1 million, or $0.06 per share for the three months ended March 31, 2007, compared to a net loss of $4.0 million, or $0.06 per share, for the same period in 2006.

"ADVENTRX has expanded its product candidate portfolio substantially over the past year and is rapidly advancing its product candidates into the clinic," stated Evan M. Levine, chief executive officer of ADVENTRX. "Depending on preclinical results and anticipated discussions with the FDA, we may have up to five product candidates in clinical development by the end of the year. In the interim, we look forward to announcing results of our 300-patient Phase 2b clinical trial of CoFactor for the treatment of metastatic colorectal cancer and results from our marketing-enabling study of ANX-530 later this year."

First Quarter 2007 Operating Results
Research and development, or R&D, expenses increased by $901,000, or 36%, to $3.4 million for the three months ended March 31, 2007 from $2.5 million for the same period a year ago. The increase in R&D expenses was primarily due to a $377,000 increase related to pre-clinical development of ANX-530 (vinorelbine emulsion) and preclinical development of ANX-201 (thiophosphonoformate), and a $390,000 increase in personnel and employee-related costs. R&D expenses for the three months ended March 31, 2007 included $254,000 in non-cash, share-based compensation expense, compared to $133,000 for the same period a year ago.

Selling, general and administrative, or SG&A, expenses increased by $1.1 million, or 62%, to $2.8 million for the three months ended March 31, 2007 from $1.7 million for the same period a year ago. The increase in SG&A expenses was primarily due to a $252,000 increase in legal fees related to patent costs, a $179,000 increase in market research for our product candidates, and a $472,000 increase in personnel and employee-related costs. SG&A expenses for the three months ended March 31, 2007 included $391,000 in non-cash, share-based compensation expense, compared to $495,000 for the same period a year ago.

Revenue of $500,000 for the three months ended March 31, 2007 represented a license fee earned from licensing ANX-211 (ZANAFLU® in the U.S.) to Theragenex, compared to no revenue for the comparable period in 2006. ADVENTRX expects that Theragenex's subsidiary, TRx Pharma, will launch ZANAFLU during the 2007 cold and influenza season. Interest income amounted to $622,000 for the three months ended March 31, 2007, compared to $237,000 for the same period a year ago.

Effective January 1, 2007, the Company adopted FASB Staff Position on No. EITF 00-19-2, *Accounting for Registration Payment Arrangements*, or FSP EITF 00-19-2. Pursuant to FSP EITF 00-19-2, the Company determined that no contingent liability was required to be recognized as of March 31, 2007 relating to a class of warrants issued in July 2005 that contained a registration payment arrangement, and accordingly, the carrying amount of the warrant liability that had been reported in previous periods was eliminated. In applying the new method retrospectively, the comparative financial statements of prior periods have been adjusted to eliminate the fair value of the warrant liability.

Balance Sheet Highlights
As of March 31, 2007, the Company had cash, cash equivalents and investments in securities totaling $47.4 million, including cash and cash equivalents of $21.0 million and short-term investments in securities of $26.4 million. Stockholders' equity amounted to $45.8 million as of March 31, 2007.

Product and Pipeline Update

Recent activities of the Company include the following:

- Continuation of patient recruitment in the Company's 1,200-patient Phase 3 pivotal clinical trial of ANX-510, or CoFactor, for the treatment of metastatic colorectal cancer. The Company anticipates completing enrollment in 2008.

- Announcement of positive results from a multi-drug treatment regimen including CoFactor at the American Association for Cancer Research (AACR) Annual Meeting.

- Continuation of patient recruitment in the Company's 31-patient Phase 2 clinical trial of CoFactor for the treatment of advanced breast cancer. The Company anticipates completing enrollment by the end of 2007.

- Continuation of patient recruitment in a 28-patient marketing enabling study of ANX-530 (vinorelbine emulsion), a chemotherapy drug used alone or in combination with other drugs to treat non-small cell lung cancer. The U.S. Food and Drug Administration accepted our Investigational New Drug Application in December 2006. The Company expects to complete the study in 2007 and, if it demonstrates bioequivalence with the currently marketed product, Navelbine® (vinorelbine tartrate), submit a New Drug Application by the end of the year.

- Presentation of preclinical results demonstrating synergistic activity against human and avian influenza (bird flu) viruses when combining ANX-201 with Tamiflu® (oseltamivir phosphate). Preclinical development of ANX-201 (thiophosphonoformate) for the treatment of HIV continues and could progress to Phase 1/2 clinical development in 2007. An abstract was accepted for presentation at the International AIDS Society Conference on HIV Pathogenesis, Treatment and Prevention.

- Presentation of positive results from preclinical testing of ANX-514 (docetaxel emulsion), a chemotherapy product candidate, in a well-recognized animal model. Study results indicated bioequivalent pharmacokinetics with a reduced risk of hypersensitivity reactions with ANX-514, as compared to the currently marketed product, Taxotere® (docetaxel). The Company currently plans to seek guidance from the FDA with respect to the appropriateness of a Section 505(b)(2) NDA regulatory path for ANX-514, and pending agreement on clinical protocol design with the FDA, initiate a marketing-enabling clinical trial of ANX-514 in 2007.

Conference Call and Webcast
Management will host a conference call with a simultaneous webcast that will take place on Monday, May 7 at 1:30 P.M. Pacific/4:30 P.M. Eastern to discuss the first quarter of 2007. Evan M. Levine, Chief Executive Officer, and Gregory P. Hanson, Senior Vice President and Chief Financial Officer, are scheduled to lead the call and will be joined by other members of the Company's senior management team. The webcast will be available live via the Internet by accessing ADVENTRX's web site at www.adventrx.com under "Investors" or by telephone at (877) 502-9274 (domestic) or (913) 981-5584 (international). Replays of the webcast will be available for 30 days, and a phone replay will be available through June 7, 2007 by dialing 888-203-1112 and entering the passcode 4320902.

About ADVENTRX Pharmaceuticals
ADVENTRX is a biopharmaceutical research and development company focused on commercializing product candidates for the treatment of cancer and infectious diseases. The Company seeks to improve the performance and safety of existing therapeutic products by addressing significant problems such as drug metabolism, bioavailability, excessive toxicity and treatment resistance. ADVENTRX's lead product candidate, ANX-510 (CoFactor®), is in pivotal Phase 3 and Phase 2b clinical trials for the treatment of metastatic colorectal cancer, as well as in a Phase 2 clinical trial for the treatment of advanced breast cancer. The Company's business is in the development stage; it has not yet marketed any products or generated any significant revenue. 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 raise sufficient capital to fund the projects necessary to meet its anticipated or stated goals and milestones; the ability to timely enroll subjects in ADVENTRX's current and anticipated clinical trials; the timing and success of clinical trials; the potential for CoFactor and ADVENTRX's other product candidates to receive regulatory approval for one or more indications on a timely basis or at all; the uncertain process of seeking regulatory approval; other difficulties or delays in developing, testing, manufacturing and marketing of CoFactor and ADVENTRX's other product candidates; the potential for regulatory authorities to require additional preclinical work or other clinical requirements to support regulatory filings; the scope and validity of patent protection for CoFactor and ADVENTRX's other product candidates; adverse side effects or inadequate therapeutic efficacy of CoFactor or ADVENTRX's other product candidates; the risk that preclinical results are not indicative of the success of subsequent clinical trials and that products will not perform as preclinical and clinical data suggest 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 assumes no obligation to revise or update any forward-looking statement, including as set forth in this press release, to reflect events or circumstances arising after the date on which it was made.

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[Tables to Follow]

ADVENTRX Pharmaceuticals, Inc. and Subsidiaries
(A Development Stage Enterprise)
Summary Condensed Consolidated Financial Information
(In 000s except for per share data)
Consolidated Statement of Operations Data:

	Quarters Ended March 31,	
	2007	**2006**
	(Unaudited)	(Unaudited)
Revenues	$ 500	$ —
Operating expenses:		
Research and development	3,385	2,484
Selling, general and administrative	2,809	1,735
Depreciation and amortization	52	37
Total operating expenses	6,246	4,256
Loss from operations	(5,746)	(4,256)
Interest income	622	236
Loss before income taxes	(5,124)	(4,020)
Provision for income taxes	—	—
Net loss	$ (5,124)	$ (4,020)
Net loss per share – basic and diluted	$ (0.06)	$ (0.06)
Weighted average shares – basic and diluted	89,677	67,976

Balance Sheet Data:

	March 31, 2007	**December 31, 2006**
	(Unaudited)	
Total cash and investments in securities	$47,440	$51,745

Net working capital	45,401	49,889
Total assets	48,630	52,798
Total liabilities	2,814	2,484
Stockholders’ equity	45,816	50,314