
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):

February 25, 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 1.01 Entry into a Material Definitive Agreement.

In connection with the appointment of Eric Rowinsky, M.D., to the board of directors (the "Board") of ADVENTRX Pharmaceuticals, Inc. (the "Company"), the Company entered into that certain Second Amendment to Rights Agreement, dated February 25, 2008 (the "Amendment"), with the Icahn Purchasers (as defined in the Amendment). The Amendment modified that certain Rights Agreement, with an effective date of July 27, 2005, as previously amended (the "Agreement"), among the Company and the Purchasers (as defined in the Agreement) pursuant to which the Company agreed to set the authorized number of directors constituting the Board at six and to not change such number except as set forth in the Agreement. Pursuant to the Amendment, the Board may set the authorized number of directors constituting the Board at seven if the vacancy created by such action is filled by a candidate appointed by a majority of the directors then in office, which majority must include the Purchaser Designee (as defined in the Agreement), if any; provided, however, that, if at any time there are then seven members of the Board and one of such members is removed or resigns, retires or dies and the Purchaser Designee, if any, does not approve a successor, the Company agrees to do those things reasonably necessary and within its control to, as soon as reasonably practicable after the effective date of such removal, resignation, retirement or death, set the authorized number of Board directors at six. A complete copy of the Amendment is filed herewith as Exhibit 10.1 and incorporated herein by reference.

The Icahn Purchasers beneficially own approximately 9.1% of the Company's outstanding common stock and Alexander J. Denner, Ph.D., a member of the Board, is affiliated with the Icahn Purchasers and is the Purchaser Designee.

For additional details regarding the appointment of Dr. Rowinsky to the Board, please see the disclosures under Item 5.02 below.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On February 25, 2008 the Company issued a press release announcing the appointment of Dr. Rowinsky to the Board, which appointment was effective as of February 25, 2008. A copy of this press release is furnished as Exhibit 99.1 hereto. No decision has been made regarding whether Dr. Rowinsky will be appointed to one or more committees of the Board.

Dr. Rowinsky currently serves as the Executive Vice President, Chief Medical Officer of ImClone Systems Incorporated and has held this position since February 2005. Dr. Rowinsky held the position of Director of the Institute of Drug Development ("IDD") at the Cancer Therapy and Research Center from 2002 to 2004 and was the Director of Clinical Research at the IDD from 1996 to 2002. He held the SBC Endowed Chair for Early Drug Development at the IDD. From 1996 to 2006, Dr Rowinsky was also a Clinical Professor of Medicine (Division of Medical Oncology) at the University of Texas Health Science Center, San Antonio, Texas. Dr. Rowinsky also served as an Associate Professor of Oncology at Johns Hopkins University from 1988 until 1996. He served on the Board of Scientific Counselors of the National Cancer Institute from 2004 to 2007. Dr. Rowinsky received a B.A. degree from New York University and an M.D. degree from the Vanderbilt University School of Medicine. Following his residency in internal medicine, he completed fellowship training in medical oncology at the Johns Hopkins University School of Medicine.

Dr. Denner, a member of the Board and the Purchaser Designee, also serves on the Board of Directors of ImClone. Additionally, Carl Icahn, who is affiliated with the Icahn Purchasers, serves as Chairman of the Board of Directors of ImClone.

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.

February 25, 2008

By: *Evan M. Levine*

Name: Evan M. Levine

Title: Chief Executive Officer & President

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
10.1	Second Amendment to Rights Agreement, dated February 25, 2008
99.1	Press Release, dated February 25, 2008

SECOND AMENDMENT TO RIGHTS AGREEMENT

This Second Amendment to Rights Agreement (this "Amendment") is entered into effective as of February 25, 2008 (the "Effective Date") by and between Adventrx Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and Icahn Partners LP, Icahn Partners Master Fund LP and High River Limited Partnership (collectively, the "Icahn Purchasers").

WHEREAS, the Company, the Icahn Purchasers and Viking Global Equities LP and VGE III Portfolio Ltd. (collectively, the "Viking Purchasers" and, together with the Icahn Purchasers, the "Purchasers") are parties to that certain Rights Agreement, with an effective date of July 27, 2005, as amended (the "Rights Agreement"), pursuant to which the Company agreed to set the authorized number of directors constituting the Company's board of directors at 6 and to not change such number, except as set forth in the Rights Agreement;

WHEREAS, pursuant to Section 6.2 of the Rights Agreement, any term of the Rights Agreement may be amended with the written consent of the Company and the Icahn Purchasers;

NOW, THEREFORE, in consideration of both the foregoing premises and the terms and conditions set forth below, the Company and the Icahn Purchasers hereby agree as follows:

1. Board of Directors. The first sentence of Section 4 of the Rights Agreement is hereby amended and restated to read in its entirety as follows:

"Effective promptly after the Closing, the Company shall set the authorized number of Board directors at six and the Company shall appoint a person suggested by the Purchasers which at the time own a majority of the Purchased Shares (the "Purchaser Designee") to the vacancy so created; provided, however, that such person, if anyone other than Mr. Carl Icahn, would not subject the Company to making any disclosures under Item 401(f) of SEC Regulation S-K in any proxy statement (the "Criteria"); provided, further, that from time to time the Board may increase the number of authorized Board directors to seven provided that any vacancy created by such an increase is filled by a majority of the Board directors then in office, which majority must include the Purchaser Designee, if any; provided, further, that if at any time there are seven members of the Board and one of such members is removed, resigns, retires or dies and the Purchaser Designee, if any, does not approve a successor, the Company agrees to do those things reasonably necessary and within its control to, as soon as reasonably practicable after the effective date of such removal, resignation, retirement or death, set the authorized number of Board directors at six."

2. Purchaser Designee. The Company and the Purchasers agree that, as of the Effective Date, the Purchaser Designee (as defined in the Rights Agreement) is Alexander J. Denner.

3. Internal Reference. The Company and the Purchasers agree that any reference in the Rights Agreement to "this Agreement" (or other similar reference) will be a reference to the Rights Agreement, as amended.

4. Conflicts. Except to the extent amended herein, the Rights Agreement remains in full force and effect.

5. Governing Law. This Amendment will be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be fully performed therein.

[Signature page follows]

IN WITNESS WHEREOF, the Company and the Icahn Purchasers have executed this Second Amendment to Rights Agreement in duplicate originals effective as of the Effective Date.

COMPANY:	ADVENTRX PHARMACEUTICALS, INC.
	By: /s/ Patrick L. Keran
	Name: Patrick L. Keran
	Title: Vice President, Legal
ICAHN PURCHASERS:	ICAHN PARTNERS LP
	By: /s/ [illegible]
	(Authorized Signatory)
	ICAHN PARTNERS MASTER FUND LP
	By: /s/ [illegible]
	(Authorized Signatory)
	HIGH RIVER LIMITED PARTNERSHIP

By: Hooper Investments LLC, its general partner

By: Barbery Corp, its member

By: /s/ [illegible]

(Authorized Signatory)

ERIC K. ROWINSKY JOINS ADVENTRX BOARD OF DIRECTORS

SAN DIEGO – February 25, 2008- ADVENTRX Pharmaceuticals, Inc. (Amex: ANX) announced today that Eric K. Rowinsky, M.D., Chief Medical Officer and Executive Vice President of ImClone Systems Incorporated, will join its Board of Directors. In connection with Dr. Rowinsky's appointment, ADVENTRX increased the size of its Board from six to seven directors.

"We are delighted to welcome Eric to our Board of Directors. He brings tremendous knowledge and expertise within the oncology field," stated Evan M. Levine, ADVENTRX's Chief Executive Officer and President. "We believe his experience will be an important asset as we advance our product candidates through the clinic," added Mr. Levine.

"I'm very pleased to be joining ADVENTRX's Board of Directors," commented Dr. Rowinsky. "I hope my contributions help advance the development and commercialization of the Company's product candidates, which hold significant potential to provide patients with better treatment options."

Prior to joining ImClone Systems in 2005, Dr. Rowinsky focused his academic efforts in cancer drug development as the Director of Clinical Research and later Director of the Institute for Drug Development of the Cancer Therapy and Research Center in San Antonio and the SBC Endowed Chair for Early Drug Development from 1996 to 2005. He was also Clinical Professor of Medicine in the Division of Medical Oncology at the University of Texas Health Science Center at San Antonio from 1996 to 2006. From 1987 to 1996, Dr. Rowinsky served as an Associate Professor of Oncology at the Johns Hopkins University School of Medicine. He was a longstanding NCI principal investigator on U01 anticancer drug development grants and integrally involved in pivotal clinical and preclinical investigations which led to the development of paclitaxel, docetaxel, topotecan, irinotecan, erlotinib and gefitinib, among others.

Dr. Rowinsky is the Editor-in-Chief of *Investigational New Drugs*, an Associate Editor and/or Editorial Board Member of *Cancer Research* (Associate Editor and Reviews Editor), *Clinical Cancer Research*, *Annals of Oncology*, *Cancer Biology and Therapy* and several other oncology journals and has published over 270 manuscripts in both the preclinical and clinical research fields. He has also served on the Scientific Advisory Board and Project Advisory Boards of a large number of pharmaceutical and biotechnology companies and has advised and/or presented aspects of New Drug Applications to the FDA on several occasions. Dr. Rowinsky's honors include receipt of the career development award of the American Cancer Society and the 6th Annual Emil J. Freireich Award for outstanding achievement of a young researcher in clinical cancer therapeutics. He also served on the Board of Scientific Counselors of the National Cancer Institute.

Dr. Rowinsky received his B.A. degree from New York University and his M.D. from the Vanderbilt University School of Medicine. Following his residency in internal medicine at the University of California, he completed fellowship training in medical oncology at the Johns Hopkins University School of Medicine.

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, bioavailability, excessive toxicity and treatment resistance. More information can be found on the Company's web site at <http://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 risk that preclinical results are not indicative of the success of subsequent clinical trials and 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; other difficulties or delays in manufacturing, marketing and obtaining regulatory approval for ADVENTRX's product candidates; the potential for regulatory authorities to require additional preclinical work or other clinical requirements to support regulatory filings; the market potential for ADVENTRX's product candidates and ADVENTRX's ability to compete in those markets; the scope and validity of patent protection for ADVENTRX's product candidates; patent and non-patent exclusivity covering Navelbine® and Taxotere®; 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 as 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

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