
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

SCHEDULE 13D
(Amendment No.)*

Under the Securities Exchange Act of 1934

AVENUE THERAPEUTICS, INC.
(Name of Issuer)

Common Stock, \$0.0001 Par Value
(Title of Class of Securities)

05360L205
(CUSIP Number)

Fortress Biotech, Inc.
c/o Lindsay A. Rosenwald, M.D.
2 Gansevoort Street, 9th Floor
New York, New York 10014
(781) 652-4500

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 26, 2017
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1.	Name of Reporting Person I.R.S. Identification No. of Above Person (Entities Only)	
	Fortress Biotech, Inc. 20-5157386	
2.	Check the Appropriate Box if a Member of a Group Not Applicable	(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC Use Only	
4.	Source of Funds (See Instructions)	
	OO	
5.	Check if Disclosure of Legal Proceeding Is Required Pursuant to Items 2(d) or 2(e)	
	Not Applicable .	
6.	Citizenship or Place of Organization	
	Delaware	
Number of Shares Beneficially Owned By Each Reporting Person with	7.	Sole Voting Power 3,570,425 ¹
	8.	Shared Voting Power 0
	9.	Sole Dispositive Power 3,570,425 ¹
	10.	Shared Dispositive Power 0
	11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,570,425 ¹
12.	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11)	
	33.1% of all outstanding shares of Issuer common stock ²	
14.	Type of Reporting Person	
	HC	

-
- ¹ Includes 333,334 shares of Issuer's common stock underlying Warrants described below and 250,000 shares of the Issuer's Class A preferred stock that are convertible into common stock.

Each share of Class A Preferred Stock is convertible, at the option of the holder, into one fully paid and nonassessable share of common stock, or the Conversion Ratio, subject to certain adjustments.

Warrants

Mr. Weiss and Dr. Rosenwald each have warrants convertible into 166,667 shares of the Issuer's common stock. These warrants were issued by the Reporting Person and are convertible into shares of the Issuer's common stock that are owned by the Reporting Person. Mr. Weiss has served as a member of the Issuer's Board of Directors since March 2015 and has served as a director and Executive Vice Chairman of the Reporting Person since February 2014. Dr. Rosenwald has been a member of the Board of Directors of the Reporting Person since October 2009 and has served as its Chairman, President and Chief Executive Officer since December 2013.

- ² Based upon 10,041,008 shares of the Issuer's common stock outstanding as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 11, 2017.
-

Item 1. Security and Issuer

This statement on Schedule 13D relates to the common stock of Avenue Therapeutics, Inc. (the “**Issuer**”). The Issuer’s principal executive office is located at 2 Gansevoort Street, 9th Floor, New York, New York 10014.

Item 2. Identity and Background

- (a) This Schedule 13D is being filed on behalf of Fortress Biotech, Inc. (the “**Reporting Person**” or “**Fortress**”) pursuant to Rule 13d-1 of Regulation D-G under the Act.
- (b) The Reporting Person’s business address is 2 Gansevoort Street, 9th Floor, New York, New York 10014.
- (c) The principal business of the Reporting Person is acquiring, developing and commercializing novel pharmaceutical and biotechnology products both within the Reporting Person and through certain of its subsidiary companies.
- (d)–(e) During the last five years, the Reporting Person: (i) has not been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors); and (ii) has not been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction resulting in it being subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) The Reporting Person is organized under the laws of the state of Delaware.

Item 3. Source and Amount of Funds or Other Consideration.

Founders Agreement and Management Services Agreement

Fortress entered into a Founders Agreement with the Issuer in February 2015 (the “**Founders Agreement**”), pursuant to which Fortress assigned to the Issuer all of its rights and interest under Fortress’s license agreement with Revogenex for IV Tramadol (the “**License Agreement**”). As consideration for the Founders Agreement, the Issuer assumed \$3.0 million in debt that Fortress accumulated for expenses and costs of forming the Issuer and obtaining the IV Tramadol license. As additional consideration for the transfer of rights under the Founders Agreement, the Issuer must also: (i) issue annually to Fortress, on the anniversary date of the Founders Agreement, shares of common stock equal to two and one half percent (2.5%) of the fully-diluted outstanding equity of the Issuer at the time of issuance; (ii) pay an equity fee in shares of the Issuer common stock, payable within five (5) business days of the closing of any equity or debt financing for the Issuer or any of its respective subsidiaries that occurs after the effective date of the Founders Agreement and ending on the date when Fortress no longer has majority voting control in the Issuer’s voting equity, equal to two and one half percent (2.5%) of the gross amount of any such equity or debt financing; and (iii) pay a cash fee equal to four and one half percent (4.5%) of the Issuer’s annual net sales, payable on an annual basis, within ninety (90) days of the end of each calendar year. In the event of a change in control (as it is defined in the Founders Agreement), Fortress will be paid a one-time change in control fee equal to five (5x) times the product of (i) net sales for the twelve (12) months immediately preceding the change in control and (ii) four and one-half percent (4.5%).

On September 13, 2016, the Issuer entered into an Amended and Restated the Founders Agreement (“**A&R Founders Agreement**”) with Fortress. The A&R Founders Agreement eliminated the Annual Equity Fee in connection with the original agreement and added a term of 15 years, which upon expiration automatically renews for successive one-year periods unless terminated by Fortress or a Change in Control occurs. Concurrently with the A&R Founders Agreement the Issuer entered into an agreement whereby the Company exchanged Fortress’ 2.3 million Class A common shares for approximately 2.5 million common shares and 250,000 Class A Preferred shares.

On June 26, 2017, the Company issued 158,125 common shares to Fortress representing 2.5% of common shares issued in connection with the IPO.

Effective as of February 17, 2015, Fortress entered into a Management Services Agreement (the “**MSA**”) with the Issuer and each of the Issuer’s current directors and officers who are directors or officers of Fortress, excluding services provided by Dr. Lucy Lu, the Company’s current Chief Executive Officer as of June 26, 2017 and the former Chief Financial Officer of Fortress (resigned as of June 26, 2017), to provide services to the Issuer pursuant to the terms of the MSA. Pursuant to the terms of the MSA, for a period of five (5) years, Fortress will render advisory and consulting services to the Issuer. In consideration for the Services, the Issuer will pay Fortress an annual consulting fee of \$0.5 million (the “**Annual Consulting Fee**”), payable in advance in equal quarterly installments on the first business day of each calendar quarter in each year, provided, however, that such Annual Consulting Fee shall be increased to \$1.0 million for each calendar year in which the Issuer has net assets in excess of \$100.0 million at the beginning of the calendar year.

On May 15, 2017, the Issuer and Fortress amended the MSA to allow for payment of the Annual Consulting Fee in the Issuer’s common stock. On June 26, 2017, the Issuer repaid \$1.0 million of the outstanding 2015 and 2016 Annual Consulting fees by issuing 166,666 shares of the Issuer’s common stock at the offering price of \$6.00 per share.

For the three months ended June 30, 2017 and 2016, the Company had expenses related to the MSA of approximately \$0.1 million and \$0.1 million, respectively. For the six months ended June 30, 2017 and 2016, the Company had expenses related to the MSA of approximately \$0.3 million and \$0.3 million, respectively.

Item 4. Purpose of Transaction.

The Reporting Person does not have any present plans or proposals that relate to or would result in: (i) the acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer, except for 333,334 shares underlying the Warrants described in Footnote 1 and any additional shares that may be issued pursuant to the Founders Agreement and the terms of the Class A preferred stock as further described above; (ii) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of the Issuer’s subsidiaries; (iii) a sale or transfer of a material amount of assets of the Issuer or any of the Issuer’s subsidiaries; (iv) any change in the present board of directors or management of the Issuer; (v) any material change in the present capitalization or dividend policy of the Issuer; (vi) any other material change in the Issuer’s business or corporate structure; (vii) changes in the Issuer’s charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person; (viii) causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (ix) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(b) of the Securities Exchange Act of 1934; or (x) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer.

(a) – (c) The Reporting Person is the beneficial owner of 3,570,425 shares of the Issuer’s common stock (including 250,000 shares of Class A preferred stock), representing beneficial ownership of 33.1% of all outstanding shares of the Issuer’s common stock based on 10,041,008 shares of the Issuer’s common stock outstanding as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the SEC on August 11, 2017. The Reporting Person has sole voting and dispositive power over the 3,570,425 shares of the Issuer’s common stock beneficially owned.

(d) Except with respect to the Warrants described in Footnote 1, no person has the power to direct the receipt of dividends on or the proceeds of sales of, the shares of common stock owned by the Reporting Person.

(e) Not Applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Reference is made to the Founders Agreement in Item 3 and the Warrants in Footnote 1 above.

Item 7. Materials to be Filed as Exhibits.

- Exhibit 7.01 Form of warrant agreement, filed as Exhibit 4.2 to Form 10-12G filed on January 12, 2017 (File No. 000-55556) and incorporated herein by reference.
- Exhibit 7.02 Amended and Restated Founders Agreement between Fortress Biotech, Inc. and Avenue Therapeutics, Inc. dated September 13, 2016, filed as Exhibit 10.2 to Form 10-12G filed on January 12, 2017 (File No. 000-55556) and incorporated herein by reference.
-

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: October 18, 2017

FORTRESS BIOTECH, INC.

By: /s/ Lindsay A. Rosenwald
Name: Lindsay A. Rosenwald, M.D.
Title: Chairman, President and Chief Executive
Officer
