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

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**SCHEDULE 13D/A**  
(Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED  
PURSUANT TO RULE 13d-2(a)  
Under the Securities Exchange Act of 1934  
(Amendment No. 1)

**Vital Therapies, Inc.**  
(Name of issuer)

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**Common Stock, par value \$0.0001**  
(Title of class of securities)

**92847R104**  
(CUSIP number)

**Muneer A. Satter**  
c/o Satter Management Co., L.P.  
676 N. Michigan Avenue, Suite 4000, Chicago, IL 60611  
(312) 448-5500

*COPY TO:*

**Robert M. Hayward, P.C.**  
**Kirkland & Ellis LLP**  
300 N. LaSalle St.  
Chicago, Illinois 60654  
(312) 862-2000

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

**May 25, 2018**  
(Date of Event which Requires Filing of this Statement)

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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 Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

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**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

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\* 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 ("Act") 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).

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## SCHEDULE 13D

CUSIP No. 92847R104

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**Explanatory Note:** The Schedule 13D originally filed by the Reporting Person with the Securities and Exchange Commission ("SEC") on April 4, 2017 ("Original Filing"), is hereby amended by this Amendment No. 1 to Schedule 13D ("Amendment"). Capitalized terms used herein and not otherwise defined have the meanings assigned to such terms in the Original Filing.

(1)	Names of reporting persons  Muneer A. Satter	
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
(3)	SEC use only	
(4)	Source of funds (see instructions)  PF; OO	
(5)	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)  <input type="checkbox"/>	
(6)	Citizenship or place of organization  United States of America	
Number of shares beneficially owned by each reporting person with:	(7)	Sole voting power  11,597,719 shares (see Item 5(a))
	(8)	Shared voting power  0 shares
	(9)	Sole dispositive power  11,597,719 shares (see Item 5(a))
	(10)	Shared dispositive power  0 shares
(11)	Aggregate amount beneficially owned by each reporting person  11,597,719 shares (see Item 5(a))	
(12)	Check if the aggregate amount in Row (11) excludes certain shares (see instructions)  <input type="checkbox"/>	
(13)	Percent of class represented by amount in Row (11)  27.2%	
(14)	Type of reporting person (see instructions)  IN	

**Item 3. Source and Amount of Funds.**

*Item 3 of the Original Filing is amended by adding the following paragraph immediately following the second paragraph thereof:*

Between June 6, 2017 and June 14, 2017, SMTP purchased in the open market an aggregate of 70,000 shares of Common Stock at a weighted average price ranging from \$3.0311 to \$3.2074. Between September 8, 2017 and September 14, 2017, SMTP purchased in the open market an aggregate of 180,000 shares of Common Stock at a weighted average price ranging from \$3.5323 to \$4.2513. Between December 7, 2017 and December 13, 2017, SMTP purchased in the open market an aggregate of 250,000 shares of Common Stock at a weighted average price ranging from \$4.7746 to \$5.5714. The source of funds for the acquisition of shares in the open market was capital committed by the partners of SMTP.

**Item 4. Purpose of the Transaction.**

*Item 4 of the Original Filing is hereby amended by adding the following paragraphs immediately following the second paragraph thereof:*

On May 25, 2018, the Company filed a registration statement on Form S-3 with the SEC using a “shelf registration” process to register both primary and secondary shares. Pursuant to the Form S-3, the Reporting Person may from time to time, after the Company announces topline data for its VTL-308 clinical study, sell up to an aggregate amount of 2,500,000 shares of Common Stock in one or more transactions, subject to market conditions and prices, liquidity objectives and other investment considerations. Such shares may also be sold in transactions exempt from the registration requirements of the Securities Act of 1933.

The Reporting Person will not sell any shares of Common Stock prior to the time the Company announces topline data for its VTL-308 clinical study.

*The third paragraph of Item 4 of the Original Filing is hereby amended by adding the following phrase to the beginning of such paragraph:*

Other than as described above in the third paragraph,

**Item 5. Interest in Securities of the Issuer.**

*Paragraph (a) of Item 5 of the Original Filing is hereby deleted and replaced as follows to reflect an increase in the Reporting Person's beneficial ownership of Common Stock:*

(a) *Amount beneficially owned as of the date hereof:*

The Reporting Person beneficially owns an aggregate of 11,597,719 shares of Common Stock. The shares of Common Stock beneficially owned by the Reporting Person include (a) 4,202,930 shares of Common Stock that are held by Muneer A. Satter Revocable Trust for which the Reporting Person serves as trustee and, in such capacity, has sole voting and dispositive power over all such shares; (b) 2,929,347 shares of Common Stock that are held by various other trusts and other entities for which the Reporting Person serves as trustee, investment advisor or manager and, in such capacity, has sole voting and dispositive power over all such shares; (c) 4,250,000 shares that are held by SMTP for which the Reporting Person has sole voting and dispositive power over all such shares; (d) warrants to acquire 60,639 shares of Common Stock that are held by the Muneer A. Satter Revocable Trust for which the Reporting Person serves as trustee and, in such capacity, has the sole power to exercise such warrants and sole voting and dispositive power over all shares underlying such warrants; (e) warrants to acquire 61,533 shares of Common Stock that are held by various trusts and other entities for which the Reporting Person serves as trustee, investment advisor or manager, and in such capacity, has the sole power to exercise such warrants and sole voting and dispositive power over all shares underlying such warrants; and (f) stock options to purchase 93,270 shares of Common Stock held by the Reporting Person. The Reporting Person also holds stock options to purchase 29,538 shares of Common Stock, which vest on the earlier of May 23, 2019 and the date immediately prior to the Issuer's 2019 annual meeting of stockholders.

*Percent of class:*

In the aggregate, the Reporting Persons beneficially own 11,597,719 shares of Common Stock, or 27.2% of the total number of shares of Common Stock outstanding.

All percentages calculated in this Schedule 13D are based upon 42,368,998 shares outstanding (which assumes no exercise of the underwriters' option to purchase additional shares) as of April 30, 2018, as disclosed in the Company's Quarterly Report on Form 10-Q filed with the SEC on May 8, 2018.

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**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: June 8, 2018

By: /s/ Muneer A. Satter

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Muneer A. Satter