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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No.)*

CARGO Therapeutics, Inc.
(Name of Issuer)

COMMON STOCK, \$0.001 PAR VALUE PER SHARE
(Title of Class of Securities)

14179K101
(CUSIP Number)

December 31, 2023
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

* 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 the disclosures provided in a prior cover page.

The information required in 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).

1.	NAMES OF REPORTING PERSONS Third Rock Ventures V, L.P.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER 0
	6.	SHARED VOTING POWER 1,737,216
	7.	SOLE DISPOSITIVE POWER 0
	8.	SHARED DISPOSITIVE POWER 1,737,216
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,737,216	
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 4.2% (1)	
12.	TYPE OF REPORTING PERSON PN	

(1) The percent of class was calculated based on 41,205,142 shares of common stock issued and outstanding as of December 11, 2023, as disclosed in the Issuer's 10-Q filed with the Securities and Exchange Commission on December 13, 2023.

1.	NAMES OF REPORTING PERSONS	
	Third Rock Ventures GP V, L.P.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER
		0
	6.	SHARED VOTING POWER
		1,737,216
	7.	SOLE DISPOSITIVE POWER
		0
	8.	SHARED DISPOSITIVE POWER
		1,737,216
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1,737,216	
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
	<input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	
	4.2% (1)	
12.	TYPE OF REPORTING PERSON	
	PN	

1.	NAMES OF REPORTING PERSONS	
	TRV GP V, LLC	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER
		0
	6.	SHARED VOTING POWER
		1,737,216
	7.	SOLE DISPOSITIVE POWER
		0
	8.	SHARED DISPOSITIVE POWER
		1,737,216
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1,737,216	
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
	<input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	
	4.2% (1)	
12.	TYPE OF REPORTING PERSON	
	OO	

1.	NAMES OF REPORTING PERSONS	
	Third Rock Ventures VI, L.P.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER
		0
	6.	SHARED VOTING POWER
		1,807,119
	7.	SOLE DISPOSITIVE POWER
		0
	8.	SHARED DISPOSITIVE POWER
		1,807,119
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1,807,119	
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
	<input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	
	4.4% (1)	
12.	TYPE OF REPORTING PERSON	
	PN	

1.	NAMES OF REPORTING PERSONS Third Rock Ventures GP VI, L.P.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER 0
	6.	SHARED VOTING POWER 1,807,119
	7.	SOLE DISPOSITIVE POWER 0
	8.	SHARED DISPOSITIVE POWER 1,807,119
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,807,119	
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 4.4% (1)	
12.	TYPE OF REPORTING PERSON PN	

1.	NAMES OF REPORTING PERSONS	
	TRV GP VI, LLC	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER 0
	6.	SHARED VOTING POWER 1,807,119
	7.	SOLE DISPOSITIVE POWER 0
	8.	SHARED DISPOSITIVE POWER 1,807,119
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,807,119	
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 4.4% (1)	
12.	TYPE OF REPORTING PERSON OO	

Item 1. Issuer

- (a) Name of Issuer:
CARGO Therapeutics, Inc. (the “**Issuer**”)
- (b) Address of Issuer’s Principal Executive Offices:
1900 Alameda Las Pulgas, Suite 350
San Mateo, CA 94403

Item 2. Filing Person

- (a)–(c) Name of Persons Filing; Address; Citizenship:
- (i) Third Rock Ventures V, L.P. (“**TRV V**”);
 - (ii) Third Rock Ventures GP V, L.P. (“**TRV GP V**”), which is the sole general partner of TRV V;
 - (iii) TRV GP V, LLC (“**TRV GP V LLC**”), which is the sole general partner of TRV GP V;
 - (iv) Third Rock Ventures VI, L.P. (“**TRV VI**”);
 - (v) Third Rock Ventures GP VI, L.P. (“**TRV GP VI**”), which is the sole general partner of TRV VI; and
 - (vi) TRV GP VI, LLC (“**TRV GP VI LLC**”), which is the sole general partner of TRV GP VI.

The address of the principal business office of each of the Reporting Persons is Third Rock Ventures, LLC, 201 Brookline Ave, Suite 1401, Boston, MA 02215.

Each of TRV V, TRV GP V, TRV VI and TRV GP VI is a Delaware limited partnership. Each of TRV GP V LLC and TRV GP VI LLC is a Delaware limited liability company.

- (d) Title of Class of Securities:
Common stock, \$0.001 par value per share, (the “**Common Stock**”)
- (e) CUSIP Number:
14179K101

Item 3. If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under Section 15 of the Act;
- (b) Bank as defined in Section 3(a)(6) of the Act;
- (c) Insurance company as defined in Section 3(a)(19) of the Act;
- (d) Investment company registered under Section 8 of the Investment Company Act of 1940;
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);

- (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940;
- (j) A non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J);
- (k) Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution:

Item 4. Ownership.

(a) and (b) Amount beneficially owned:

- (i) TRV V directly owns 1,737,216 shares of Common Stock (the “**V Shares**”), which represents approximately 4.2% of the outstanding shares of Common Stock.
- (ii) TRV GP V is the general partner of TRV V and may be deemed to beneficially own the V Shares.
- (iii) TRV GP V LLC is the general partner of TRV GP V and may be deemed to beneficially own the V Shares.
- (iv) TRV VI directly owns 1,807,119 shares of Common Stock (the “**VI Shares**”), which represents approximately 4.4% of the outstanding shares of Common Stock.
- (v) TRV GP VI is the general partner of TRV VI and may be deemed to beneficially own the VI Shares.
- (vi) TRV GP VI LLC is the general partner of TRV GP VI and may be deemed to beneficially own the VI Shares.

Each of TRV V, TRV GP V, and TRV GP V LLC, on the one hand, and TRV VI, TRV GP VI and TRV GP VI LLC, on the other hand, disclaim the existence of a “group” for purposes of Rule 13d-5 of the Securities Exchange Act of 1934, as amended, and nothing contained in this report shall be deemed an admission that any such group exists or may exist.

(c) Number of shares as to which such person has:

Reporting Person	Number of Shares of Common Stock			
	(i)	(ii)	(iii)	(iv)
TRV V	0	1,737,216	0	1,737,216
TRV GP V	0	1,737,216	0	1,737,216
TRV GP V LLC	0	1,737,216	0	1,737,216
TRV VI	0	1,807,119	0	1,807,119
TRV GP VI	0	1,807,119	0	1,807,119
TRV GP VI LLC	0	1,807,119	0	1,807,119

- (i) Sole power to vote or direct the vote
- (ii) Shared power to vote or to direct the vote
- (iii) Sole power to dispose or to direct the disposition of
- (iv) Shared power to dispose or to direct the disposition of

The percent of class was calculated based on 41,205,142 shares of common stock issued and outstanding as of December 11, 2023, as disclosed in the Issuer's 10-Q filed with the Securities and Exchange Commission on December 13, 2023.

Item 5. Ownership of Five Percent or Less of a Class.

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

Not applicable.

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: February 14, 2024

THIRD ROCK VENTURES V, L.P.

By: THIRD ROCK VENTURES GP V, L.P.,
General Partner

By: TRV GP V, LLC,
General Partner

By: /s/ Kevin Gillis
Kevin Gillis
Chief Operating Officer

THIRD ROCK VENTURES GP V, L.P.

By: TRV GP V, LLC,
General Partner

By: /s/ Kevin Gillis
Kevin Gillis
Chief Operating Officer

TRV GP V, LLC

By: /s/ Kevin Gillis
Kevin Gillis
Chief Operating Officer

THIRD ROCK VENTURES VI, L.P.

By: THIRD ROCK VENTURES GP VI, L.P.,
General Partner

By: TRV GP VI, LLC,
General Partner

By: /s/ Kevin Gillis
Kevin Gillis
Chief Operating Officer

THIRD ROCK VENTURES GP VI, L.P.

By: TRV GP VI, LLC,
General Partner

By: /s/ Kevin Gillis
Kevin Gillis
Chief Operating Officer

TRV GP VI, LLC

By: /s/ Kevin Gillis

Kevin Gillis

Chief Operating Officer