

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Schedule 13G
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1 (b), (c) AND (d) AND AMENDMENTS THERETO
FILED PURSUANT TO 13d-2 (b)
(Amendment No. _____)*

Replimune Group, Inc.

(Name of Issuer)

Common Stock, par value \$0.001

(Title of Class of Securities)

76029N106

(CUSIP Number)

July 20, 2018

(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 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).

(Continued on following pages)

Page 1 of 11

Exhibit Index on Page 10

1	NAME OF REPORTING PERSONS		Foresite Capital Fund III, L.P. ("FCF III")
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	779,656 shares, except that Foresite Capital Management III, LLC ("FCM III"), the general partner of FCF III, may be deemed to have sole power to vote these shares, and James Tananbaum ("Tananbaum"), the managing member of FCM III, may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER	See response to row 5.
	7	SOLE DISPOSITIVE POWER	779,656 shares, except that FCM III, the general partner of FCF III, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM III, may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER	See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		779,656
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		2.5%*
12	TYPE OF REPORTING PERSON		PN

* As reported by the Issuer in its 10-Q filed with the Securities and Exchange Commission on November 14, 2018, the total number of shares of Common Stock outstanding was 31,553,672 as of November 12, 2018.

1	NAME OF REPORTING PERSONS		Foresite Capital Management III, LLC ("FCM III")
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	779,656 shares, all of which are directly owned by FCF III. FCM III, the general partner of FCF III, may be deemed to have sole power to vote these shares, and Tananbaum, the managing member of FCM III, may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER	See response to row 5.
	7	SOLE DISPOSITIVE POWER	779,656 shares, all of which are directly owned by FCF III. FCM III, the general partner of FCF III, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM III, may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER	See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		779,656
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		2.5%*
12	TYPE OF REPORTING PERSON		OO

* As reported by the Issuer in its 10-Q filed with the Securities and Exchange Commission on November 14, 2018, the total number of shares of Common Stock outstanding was 31,553,672 as of November 12, 2018.

1	NAME OF REPORTING PERSONS		Foresite Capital Fund IV, L.P. ("FCF IV")
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	1,229,656 shares, except that Foresite Capital Management IV, LLC ("FCM IV"), the general partner of FCF IV, may be deemed to have sole power to vote these shares, and Tananbaum, the managing member of FCM IV, may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER	See response to row 5.
	7	SOLE DISPOSITIVE POWER	1,229,656 shares, except that FCM IV, the general partner of FCF IV, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM IV, may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER	See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		1,229,656
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		3.9%*
12	TYPE OF REPORTING PERSON		PN

* As reported by the Issuer in its 10-Q filed with the Securities and Exchange Commission on November 14, 2018, the total number of shares of Common Stock outstanding was 31,553,672 as of November 12, 2018.

1	NAME OF REPORTING PERSONS		Foresite Capital Management IV, LLC ("FCM IV")
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	1,229,656 shares, all of which are directly owned by FCF IV. FCM IV, the general partner of FCF IV, may be deemed to have sole power to vote these shares, and Tananbaum, the managing member of FCM IV, may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER	See response to row 5.
	7	SOLE DISPOSITIVE POWER	1,229,656 shares, all of which are directly owned by FCF IV. FCM IV, the general partner of FCF IV, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM IV, may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER	See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		1,229,656
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		3.9%*
12	TYPE OF REPORTING PERSON		OO

* As reported by the Issuer in its 10-Q filed with the Securities and Exchange Commission on November 14, 2018, the total number of shares of Common Stock outstanding was 31,553,672 as of November 12, 2018.

1	NAME OF REPORTING PERSONS	James Tananbaum ("Tananbaum")
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	United States
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 2,009,312 shares, of which 779,656 are directly owned by FCF III and 1,229,656 are directly owned by FCF IV. Tananbaum is the managing member of FCM III, which is the general partner of FCF III, and the managing member of FCM IV, which is the general partner of FCF IV. Tananbaum may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER See response to row 5.
	7	SOLE DISPOSITIVE POWER 2,009,312 shares, of which 779,656 are directly owned by FCF III and 1,229,656 are directly owned by FCF IV. Tananbaum is the managing member of FCM III, which is the general partner of FCF III, and the managing member of FCM IV, which is the general partner of FCF IV. Tananbaum may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	2,009,312
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	6.4%*
12	TYPE OF REPORTING PERSON	IN

* As reported by the Issuer in its 10-Q filed with the Securities and Exchange Commission on November 14, 2018, the total number of shares of Common Stock outstanding was 31,553,672 as of November 12, 2018.

ITEM 1(A). NAME OF ISSUER

Replimune Group, Inc. (the "Issuer")

ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

18 Commerce Way
Woburn, MA 01801

ITEM 2(A). NAME OF PERSONS FILING

This Schedule is filed by Foresite Capital Fund III, L.P., a Delaware limited partnership ("FCF III"), Foresite Capital Management III, LLC, a Delaware limited liability company ("FCM III"), Foresite Capital Fund IV, L.P., a Delaware limited partnership ("FCF IV"), Foresite Capital Management IV, LLC, a Delaware limited liability company ("FCM IV"), and James Tananbaum. The foregoing entities and individuals are collectively referred to as the "Reporting Persons."

ITEM 2(B). ADDRESS OF PRINCIPAL OFFICE

The address for each of the Reporting Persons is:

c/o Foresite Capital Management
600 Montgomery Street, Suite 4500
San Francisco, CA 94111

ITEM 2(C). CITIZENSHIP

See Row 4 of cover page for each Reporting Person.

ITEM 2(D). TITLE OF CLASS OF SECURITIES

Common Stock, par value \$0.001

ITEM 2(D) CUSIP NUMBER

76029N106

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B) OR (C), CHECK WHETHER THE PERSON FILING IS A:

Not applicable.

ITEM 4. OWNERSHIP

The following information with respect to the ownership of the Common Stock of the Issuer by the persons filing this Statement is provided as of January 23, 2019:

(a) Amount beneficially owned:

See Row 9 of cover page for each Reporting Person.

(b) Percent of Class:

See Row 11 of cover page for each Reporting Person.

(c) Number of shares as to which such person has:(i) Sole power to vote or to direct the vote:

See Row 5 of cover page for each Reporting Person.

(ii) Shared power to vote or to direct the vote:

See Row 6 of cover page for each Reporting Person.

(iii) Sole power to dispose or to direct the disposition of:

See Row 7 of cover page for each Reporting Person.

(iv) Shared power to dispose or to direct the disposition of:

See Row 8 of cover page for each Reporting Person.

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.

Under certain circumstances set forth in the limited partnership agreements of FCF III and FCF IV and the limited liability company agreements of FCM III and FCM IV the partners or members, as the case may be, of each of such entities may be deemed to have the right to receive dividends from, or the proceeds from the sale of, shares of the Issuer directly or indirectly owned by each such entity of which they are a partner or member.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

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.

By signing below, I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

SIGNATURES

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: January 23, 2019

FORESITE CAPITAL FUND III, L.P.

By: FORESITE CAPITAL MANAGEMENT III, LLC
Its: General Partner

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

FORESITE CAPITAL MANAGEMENT III, LLC

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

FORESITE CAPITAL FUND IV, L.P.

By: FORESITE CAPITAL MANAGEMENT IV, LLC
Its: General Partner

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

FORESITE CAPITAL MANAGEMENT IV, LLC

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

JAMES TANANBAUM

By: /s/ James Tananbaum
Name: James Tananbaum

EXHIBIT INDEX

Found on
Sequentially
Numbered Page

Exhibit

Exhibit A: Agreement of Joint Filing

11

EXHIBIT A

Agreement of Joint Filing

The undersigned hereby agree that a single Schedule 13G (or any amendment thereto) relating to the Common Stock of the Issuer shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13G.

Date: January 23, 2019

FORESITE CAPITAL FUND III, L.P.

By: FORESITE CAPITAL MANAGEMENT III, LLC
Its: General Partner

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

FORESITE CAPITAL MANAGEMENT III, LLC

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

FORESITE CAPITAL FUND IV, L.P.

By: FORESITE CAPITAL MANAGEMENT IV, LLC
Its: General Partner

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

FORESITE CAPITAL MANAGEMENT IV, LLC

By: /s/ James Tananbaum
Name: James Tananbaum
Title: Managing Member

JAMES TANANBAUM

By: /s/ James Tananbaum
Name: James Tananbaum
