

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No.)*

Inozyme Pharma, Inc.

(Name of Issuer)

Common stock, par value \$0.0001 per share

(Title of Class of Securities)

45790W108

(CUSIP Number)

April 14, 2022

(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 | NAME OF REPORTING PERSONS Rock Springs Capital Management LP | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/> | |
| 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 2,452,637 |
| | 7 | SOLE DISPOSITIVE POWER 0 |
| | 8 | SHARED DISPOSITIVE POWER 2,452,637 |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,452,637 | |
| 10 | CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/> | |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.12% | |
| 12 | TYPE OF REPORTING PERSON IA | |

| | | |
|--|--|---------------------------------------|
| 1 | NAME OF REPORTING PERSONS Rock Springs Capital Master Fund LP | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/> | |
| 3 | SEC USE ONLY | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH | 5 | SOLE VOTING POWER 0 |
| | 6 | SHARED VOTING POWER 2,200,000 |
| | 7 | SOLE DISPOSITIVE POWER 0 |
| | 8 | SHARED DISPOSITIVE POWER 2,200,000 |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,200,000 | |
| 10 | CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/> | |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.49% | |
| 12 | TYPE OF REPORTING PERSON IA | |

| | | |
|--|--|---------------------------------------|
| 1 | NAME OF REPORTING PERSONS Rock Springs Capital LLC | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/> | |
| 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 2,452,637 |
| | 7 | SOLE DISPOSITIVE POWER 0 |
| | 8 | SHARED DISPOSITIVE POWER 2,452,637 |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,452,637 | |
| 10 | CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/> | |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.12% | |
| 12 | TYPE OF REPORTING PERSON OO; HC | |

Item 1. (a) Name of Issuer

Inozyme Pharma, Inc. (the "Issuer")

(b) Address of Issuer's Principal Executive Offices

321 Summer Street, Suite 400
Boston, MA 02210

Item 2. (a) Names of Person Filing

This Statement is filed on behalf of each of the following persons (collectively, the "Reporting Persons"):

- i. Rock Springs Capital Management LP ("RSCM");
- ii. Rock Springs Capital Master Fund LP ("Master Fund"); and
- iii. Rock Springs Capital LLC ("RSC");

This Statement relates to shares (as defined herein) held directly by the Master Fund, which is a Cayman Island exempted limited partnership, and Four Pines Master Fund LP ("Four Pines"), which is a Cayman Islands exempted limited partnership, and indirectly held by RSCM, a Delaware limited partnership, and RSC, a Delaware limited liability company. RSCM serves as the investment manager to each of the Master Fund and Four Pines. RSC is the general partner of RSCM.

(b) Address of Principal Business Office, or, if none, Residence

Rock Springs Capital Management LP and Rock Springs Capital LLC
650 South Exeter, Suite 1070
Baltimore, MD 21202

Rock Springs Capital Master Fund

c/o Walkers Corporate Limited
190 Elgin Avenue
George Town, Grand Cayman, KY1-9008, Cayman Islands

(c) Citizenship

Rock Springs Capital Management LP - Delaware
Rock Springs Capital Master Fund LP - Cayman Islands
Rock Springs Capital LLC - Delaware

(d) Title of Class of Securities

Common stock, par value \$0.0001 per share (the "shares")

(e) CUSIP No.:

45790W108

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-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 (15 U.S.C. 80a-3);
- (j) A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- (k) A group, in accordance with §240.13d-1(b)(1)(ii)(K). 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

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

As of the date of this filing, the Reporting Persons may be deemed to be the beneficial owners of 2,452,637 shares, which amount includes 2,200,000 shares directly beneficially owned by the Master Fund, and 252,637 shares directly beneficially owned by Four Pines. The percent of class is determined by dividing the number of shares beneficially owned by the Reporting Persons by 40,095,398, as reported on the Issuer's Prospectus filed on April 14, 2022, which is understood to be the number of shares outstanding upon closing of the Issuer's secondary offering on April 19, 2022.

(a) Amount beneficially owned:

Rock Springs Capital Management LP: 2,452,637
Rock Springs Capital Master Fund LP: 2,200,000
Rock Springs Capital LLC: 2,452,637

(b) Percent of Class:

Rock Springs Capital Management LP: 6.12%
Rock Springs Capital Master Fund LP: 5.49%
Rock Springs Capital LLC: 6.12%

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

Rock Springs Capital Management LP: 0
Rock Springs Capital Master Fund LP: 0
Rock Springs Capital LLC: 0

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

Rock Springs Capital Management LP: 2,452,637
Rock Springs Capital Master Fund LP: 2,200,000
Rock Springs Capital LLC: 2,452,637

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

Rock Springs Capital Management LP: 0
Rock Springs Capital Master Fund LP: 0
Rock Springs Capital LLC: 0

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

Rock Springs Capital Management LP: 2,452,637
Rock Springs Capital Master Fund LP: 2,200,000
Rock Springs Capital LLC: 2,452,637

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

See disclosure in Items 2 and 4 hereof. Certain funds listed in Item 2(a) are known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares covered by this Statement that may be deemed to be beneficially owned by the Reporting Persons.

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

Please see response to Item 2.

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.

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.

Dated: April 25, 2022

Rock Springs Capital Management LP

By: Rock Springs Capital LLC, General Partner

By: Graham McPhail

Name: Graham McPhail

Title: Member

Rock Springs Capital LLC

By: Graham McPhail

Name: Graham McPhail

Title: Member

Rock Springs Capital Master Fund LP

By: Rock Springs Capital Management LP, Investment Manager

By: Rock Springs Capital LLC, General Partner

By: Graham McPhail

Name: Graham McPhail

Title: Member

Exhibit I**JOINT FILING STATEMENT****PURSUANT TO RULE 13d-1(k)**

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G, is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G, shall be filed on behalf of each of the undersigned without the necessity of filing additional joint acquisition statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Dated: April 25, 2022

Rock Springs Capital Management LP

By: Rock Springs Capital LLC, General Partner

By: Graham McPhail

Name: Graham McPhail

Title: Member

Rock Springs Capital LLCBy: Graham McPhail

Name: Graham McPhail

Title: Member

Rock Springs Capital Master Fund LP

By: Rock Springs Capital Management LP, Investment Manager

By: Rock Springs Capital LLC, General Partner

By: Graham McPhail

Name: Graham McPhail

Title: Member