

---

---

# SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

**SCHEDULE 13D**  
(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)**

(Amendment No. \_\_\_)\*

**Inozyme Pharma, Inc.**  
(Name of Issuer)

Common Stock, \$0.0001 par value  
(Title of Class of Securities)

45790W108  
(CUSIP Number)

Nathalie Auber  
Sofinnova Investments, Inc.  
3000 Sand Hill Road, Bldg 4, Suite 250  
Menlo Park, CA 94025  
(650) 681-8420  
(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

**COPY TO:**

Jonathan Goodwin, Esq.  
c/o Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP  
550 Allerton Street, Redwood City, CA 94063  
(650) 321-2400

July 28, 2020  
(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 Rule 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.

This 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).

---

---

1	NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Sofinnova Venture Partners X, L.P. ("SVP X")		
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	SOURCE OF FUNDS WC		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 2,028,308 shares, except that Sofinnova Management X, L.L.C. ("SM X"), the general partner of SVP X, may be deemed to have sole voting power, and Dr. Michael F. Powell ("Powell"), Dr. James I. Healy ("Healy"), and Dr. Maha Katabi ("Katabi"), the managing members of SM X, may be deemed to have shared power to vote these shares.
		8	SHARED VOTING POWER See response to row 7.
		9	SOLE DISPOSITIVE POWER 2,028,308 shares, except that SM X, the general partner of SVP X, may be deemed to have sole dispositive power and Powell, Healy, and Katabi, the managing members of SM X, may be deemed to have shared power to dispose of these shares.
		10	SHARED DISPOSITIVE POWER See response to row 9.
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,028,308		
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  8.7%		
14	TYPE OF REPORTING PERSON  PN		

1	NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Sofinnova Management X, L.L.C. ("SM X")		
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	SOURCE OF FUNDS AF		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole voting power, and Powell, Healy, and Katabi, the managing members of SM X, may be deemed to have shared power to vote these shares.
		8	SHARED VOTING POWER See response to row 7.
		9	SOLE DISPOSITIVE POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole dispositive power, and Powell, Healy, and Katabi, the managing members of SM X, may be deemed to have shared dispositive power over these shares.
		10	SHARED DISPOSITIVE POWER See response to row 9.
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,028,308		
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  8.7%		
14	TYPE OF REPORTING PERSON  OO		

1	NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Dr. Michael F. Powell ("Powell")		
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	SOURCE OF FUNDS AF		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
		8	SHARED VOTING POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole voting power, and Powell, a managing member of SM X, may be deemed to have shared voting power to vote these shares.
		9	SOLE DISPOSITIVE POWER 0
		10	SHARED DISPOSITIVE POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole dispositive power, and Powell, a managing member of SM X, may be deemed to have shared power to dispose of these shares.
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,028,308		
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  8.7%		
14	TYPE OF REPORTING PERSON  IN		

1	NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Dr. James I. Healy ("Healy")		
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	SOURCE OF FUNDS AF		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
		8	SHARED VOTING POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole voting power, and Healy, a managing member of SM X, may be deemed to have shared voting power to vote these shares.
		9	SOLE DISPOSITIVE POWER 0
		10	SHARED DISPOSITIVE POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole dispositive power, and Healy, a managing member of SM X, may be deemed to have shared power to dispose of these shares.
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,028,308		
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  8.7%		
14	TYPE OF REPORTING PERSON  IN		

1	NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Dr. Maha Katabi ("Katabi")		
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	SOURCE OF FUNDS AF		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION Canadian Citizen		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
		8	SHARED VOTING POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole voting power, and Katabi, a managing member of SM X, may be deemed to have shared voting power to vote these shares.
		9	SOLE DISPOSITIVE POWER 0
		10	SHARED DISPOSITIVE POWER 2,028,308 shares, all of which are owned directly by SVP X. SM X, the general partner of SVP X, may be deemed to have sole dispositive power, and Katabi, a managing member of SM X, may be deemed to have shared power to dispose of these shares.
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,028,308		
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 8.7%		
14	TYPE OF REPORTING PERSON IN		

### Statement on Schedule 13D

This Statement on Schedule 13D (“Schedule 13D”) relates to the beneficial ownership of Common Stock, \$0.0001 par value per share (“Common Stock”) of Inozyme Pharma, Inc., a Delaware corporation (“Issuer”) and is being filed to reflect the acquisition of Common Stock by Sofinnova Venture Partners X, L.P., a Delaware limited partnership (“SVP X”), Sofinnova Management X, L.L.C., a Delaware limited liability company (“SM X”), Dr. Michael F. Powell (“Powell”), Dr. James I. Healy (“Healy”), and Dr. Maha Katabi (“Katabi” and collectively with SVP X, SM X, Powell, and Healy, the “Reporting Persons”).

#### ITEM 1. SECURITY AND ISSUER.

- (a) The class of equity securities to which this statement relates is the Common Stock of the Issuer.
- (b) The Issuer’s principal executive offices are located at 321 Summer Street, Suite 400, Boston, Massachusetts 02210.

#### ITEM 2. IDENTITY AND BACKGROUND.

(a) The persons and entities filing this Schedule 13D are SVP X, SM X, Powell, Healy, and Katabi. SM X, the general partner of SVP X, may be deemed to have sole power to vote and sole power to dispose of shares of the Issuer directly owned by SVP X.

(b) The address of the principal place of business for each of the Reporting Persons is c/o Sofinnova Investments, Inc., 3000 Sand Hill Road, Bldg 4, Suite 250, Menlo Park, California 94025.

(c) The principal occupation of each of the Reporting Persons is the venture capital investment business. The principal business of SVP X is to make investments in private and public companies, and the principal business of SM X is to serve as the general partner of SVP X. Powell, Healy, and Katabi are the managing members of SM X.

(d) During the last five years, none of the Reporting Persons has been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years, none of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is 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) SVP X is a Delaware limited partnership. SM X is a Delaware limited liability company. Powell and Healy are U.S. citizens. Katabi is a Canadian citizen.

#### ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

On March 22, 2019, SVP X purchased 5,944,056 shares of Series A-2 Convertible Preferred Stock (the “Series A-2 Shares”) from the Issuer at a purchase price of \$1.43 per share, or \$8,500,000 in the aggregate. On June 5, 2020, SVP X purchased an additional 5,944,056 Series A-2 Shares from the Issuer at a purchase price of \$1.43 per share, or \$8,500,000 in the aggregate. In connection with the Issuer’s initial public offering of Common Stock (the “Offering”), the Issuer’s Series A-2 Shares automatically converted into shares of Common Stock on a 7.4730-for-one basis.

In connection with the Offering, SVP X purchased 437,500 shares of Common Stock from the Issuer at a purchase price of \$16.00 per share, or \$7,000,000 in the aggregate. Such purchase occurred pursuant to and on the terms set forth in the Issuer’s Prospectus filed pursuant to Rule 424(b)(4) on July 24, 2020 with the Securities and Exchange Commission (the “Prospectus”).

---

Unless noted above, the source of the funds for all purchases and acquisitions by the Reporting Persons was from working capital. Certain purchases by SVP X were made using its working capital funded partially through a line of credit with Silicon Valley Bank in the normal course of business and then paid down from the proceeds from investor capital calls.

Unless noted above, no part of the purchase price was borrowed by any Reporting Person for the purpose of acquiring any securities discussed in this Item 3.

#### **ITEM 4. PURPOSE OF TRANSACTION.**

The Reporting Persons hold their securities of the Issuer for investment purposes. Depending on the factors discussed herein, the Reporting Persons may, from time to time, acquire additional Common Stock and/or retain and/or sell all or a portion of the Common Stock held by the Reporting Persons in the open market or in privately negotiated transactions, and/or may distribute the Common Stock held by the Reporting Persons to their respective members or limited partners. Any actions the Reporting Persons might undertake will be dependent upon the Reporting Persons' review of numerous factors, including, among other things, the price levels of the Common Stock, general market and economic conditions, ongoing evaluation of the Issuer's business, financial condition, operations and prospects; the relative attractiveness of alternative business and investment opportunities, and other future developments. Except as set forth above, the Reporting Persons have no present plans or intentions which would result in or relate to any of the transactions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

#### **ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.**

(a,b) Regarding aggregate beneficial ownership, see Row 11 of the cover page of each Reporting Person. Regarding percentage beneficial ownership, see Row 13 of the cover page of each Reporting Person. Regarding sole power to vote shares, see Row 7 of the cover page of each Reporting Person. Regarding shared power to vote shares, see Row 8 of the cover page of each Reporting Person. Regarding sole power to dispose of shares, see Row 9 of the cover page of each Reporting Person. Regarding shared power to dispose of shares, see Row 10 of the cover page of each Reporting Person. The percentage listed in Row 13 for each Reporting Person was calculated based upon 23,372,844 shares of Common Stock reported to be outstanding as of November 6, 2020 as reported on the Issuer's Form 10-Q filed with the Securities and Exchange Commission on November 12, 2020.

(c) Except as set forth in Item 3 above, the Reporting Persons have not effected any transaction in the securities of the Issuer during the past 60 days.

(d) Under certain circumstances set forth in the limited partnership agreement of SVP X, the general partner and limited partners of SVP X may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the Issuer owned by such entity of which they are a partner.

(e) Not applicable.

#### **ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.**

SVP X has agreed that, without the prior written consent of BofA Securities, Inc, Cowen and Company, LLC and Piper Sandler & Co., on behalf of the Issuer's underwriters, it will not, subject to limited exceptions, during the period ending 180 days after the date set forth on the Prospectus offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of Common Stock, or any options or warrants to purchase any shares of Common Stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of Common Stock, whether now owned or hereinafter acquired, owned directly (including holding as a custodian) or with respect to which it has beneficial ownership within the rules and regulations of the Securities and Exchange Commission. Such Lock-Up Agreement is more fully described in the Prospectus and was filed as Exhibit A to Exhibit 1.1 to the Issuer's Amendment No. 1 to Form S-1 Registration Statement (File No. 333-239648), and such description is incorporated herein by reference.

---



SVP X is a party to a Second Amended and Restated Investors' Rights Agreement among the Issuer, SVP X and other shareholders. Subject to the terms of such Second Amended and Restated Investors' Rights Agreement, SVP X can demand that the Issuer file a registration statement or request that its Common Stock be covered by a registration statement that the Issuer is otherwise filing under certain specified circumstances. Such Second Amended and Restated Investors' Rights Agreement dated as of November 9, 2018 is more fully described in the Prospectus and was filed as Exhibit 10.1 to the Issuer's Form S-1 Registration Statement (File No. 333-239648), and such description is incorporated herein by reference.

**ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.**

EXHIBIT A	Agreement of Joint Filing
EXHIBIT B	Power of Attorney
EXHIBIT C	Form of Lock-Up Agreement described in Item 6, filed as Exhibit A to Exhibit 1.1 to the Issuer's Form S-1 Registration Statement (File No. 333-239648) is incorporated herein by reference.
EXHIBIT D	Second Amended and Restated Investors' Rights Agreement described in Item 6, filed as Exhibit 10.1 to the Issuer's Form S-1 Registration Statement (File No. 333-239648) is incorporated herein by reference.

---

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: March 3, 2021

SOFINNOVA VENTURE PARTNERS X, L.P., a Delaware Limited Partnership

By: SOFINNOVA MANAGEMENT X, L.L.C., a Delaware Limited Liability Company  
Its: General Partner

By: /s/ Nathalie Auber  
\_\_\_\_\_  
Nathalie Auber  
Attorney-in-Fact

SOFINNOVA MANAGEMENT X, L.L.C., a Delaware Limited Liability Company

By: /s/ Nathalie Auber  
\_\_\_\_\_  
Nathalie Auber  
Attorney-in-Fact

DR. JAMES I. HEALY  
DR. MICHAEL F. POWELL  
DR. MAHA KATABI

By: /s/ Nathalie Auber  
\_\_\_\_\_  
Nathalie Auber  
Attorney-in-Fact

---

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description</u>
A	Agreement of Joint Filing
B	Power of Attorney
C	Form of Lock-Up Agreement described in Item 6, filed as Exhibit A to Exhibit 1.1 to the Issuer's Form S-1 Registration Statement (File No. 333-239648) is incorporated herein by reference.
D	Second Amended and Restated Investors' Rights Agreement described in Item 6, filed as Exhibit 10.1 to the Issuer's Form S-1 Registration Statement (File No. 333-239648) is incorporated herein by reference.

---

EXHIBIT A

Agreement of Joint Filing

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

Date: March 3, 2021

SOFINNOVA VENTURE PARTNERS X, L.P., a Delaware Limited Partnership

By: SOFINNOVA MANAGEMENT X, L.L.C., a Delaware Limited Liability Company  
Its: General Partner

By: /s/ Nathalie Auber  
Nathalie Auber  
Attorney-in-Fact

SOFINNOVA MANAGEMENT X, L.L.C., a Delaware Limited Liability Company

By: /s/ Nathalie Auber  
Nathalie Auber  
Attorney-in-Fact

DR. JAMES I. HEALY  
DR. MICHAEL F. POWELL  
DR. MAHA KATABI

By: /s/ Nathalie Auber  
Nathalie Auber  
Attorney-in-Fact

---

EXHIBIT BPower of Attorney

Nathalie Auber has signed this Schedule 13D as Attorney-In-Fact. Note that copies of the applicable Power of Attorney are already on file with the appropriate agencies.

---