
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934
(Amendment No. 4)*

Inozyme Pharma, Inc.

(Name of Issuer)

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

45790W108
(CUSIP Number)

Robert Hopfner
Pivotal bioVenture Partners Fund I U.G.P. Ltd
501 2nd Street, Suite 200
San Francisco, CA 94107
(415) 697-1002

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

February 12, 2024
(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 Section 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.

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, as amended ("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. Pivotal bioVenture Partners Fund I, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
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 Cayman Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 2,923,110
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,923,110
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,923,110	
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) 4.7%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Pivotal bioVenture Partners Fund II, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
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 Cayman Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,571,741
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,571,741
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,571,741	
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) 2.5%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Pivotal bioVenture Partners Fund II G.P. Ltd	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
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 Cayman Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,571,741
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,571,741
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,571,741	
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) 2.5%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Pivotal bioVenture Partners Fund I G.P., L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
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 Cayman Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 2,923,110
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,923,110
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,923,110	
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) 4.7%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Pivotal bioVenture Partners Fund I U.G.P. Ltd	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
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 Cayman Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 2,923,110
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,923,110
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,923,110	
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) 4.7%	
14.	Type of Reporting Person (See Instructions) CO	

1.	Names of Reporting Persons. Pivotal Partners Ltd	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
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 Cayman Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 4,494,851
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 4,494,851
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,494,851	
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) 7.2%	
14.	Type of Reporting Person (See Instructions) CO	

1.	Names of Reporting Persons. Pivotal Life Sciences Holdings Limited	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
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 Cayman Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 4,494,851
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 4,494,851
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,494,851	
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) 7.2%	
14.	Type of Reporting Person (See Instructions) CO	

1.	Names of Reporting Persons. Nan Fung Life Sciences Holdings Limited	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
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 British Virgin Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 4,494,851
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 4,494,851
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,494,851	
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) 7.2%	
14.	Type of Reporting Person (See Instructions) CO	

1.	Names of Reporting Persons. NF Investment Holdings Limited	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
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 British Virgin Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 4,494,851
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 4,494,851
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,494,851	
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) 7.2%	
14.	Type of Reporting Person (See Instructions) CO	

1.	Names of Reporting Persons. Nan Fung Group Holdings Limited	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
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 British Virgin Islands	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 4,494,851
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 4,494,851
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,494,851	
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) 7.2%	
14.	Type of Reporting Person (See Instructions) CO	

Item 2. Identity and Background

Item 2(a) and 2(f) are amended and restated as follows:

- (a) This Schedule 13D is being filed by each of the following persons (each, a “Reporting Person”):
- (i) Pivotal bioVenture Partners Fund I, L.P. (“Pivotal”)
 - (ii) Pivotal bioVenture Partners Fund II, L.P. (“Pivotal II”)
 - (iii) Pivotal bioVenture Partners Fund II G.P. Ltd (“Pivotal II GP”)
 - (iv) Pivotal bioVenture Partners Fund I G.P., L.P. (“Pivotal I GP”)
 - (v) Pivotal bioVenture Partners Fund I U.G.P. Ltd (the “Ultimate General Partner”)
 - (vi) Pivotal Partners Ltd (“Pivotal Partners”)
 - (vii) Pivotal Life Sciences Holdings Limited (“Pivotal Life Sciences”)
 - (viii) Nan Fung Life Sciences Holdings Limited (“Nan Fung Life Sciences”)
 - (ix) NF Investment Holdings Limited (“NFIHL”)
 - (x) Nan Fung Group Holdings Limited (“NFGHL”)

Pivotal I GP is the general partner of Pivotal, and the Ultimate General Partner is the general partner of Pivotal I GP. Pivotal II GP is the general partner of Pivotal II. The Ultimate General Partner and Pivotal II GP are wholly-owned by Pivotal Partners. Pivotal Partners is wholly-owned by Pivotal Life Sciences. Pivotal Life Sciences is wholly owned by Nan Fung Life Sciences, and Nan Fung Life Sciences is wholly-owned by NFIHL, which is wholly owned by NFGHL. Robert Hopfner, Ph.D., is a managing partner of the Ultimate General Partner. The members of the Executive Committee of NFGHL make investment decisions with respect to the securities of the Issuer held by Pivotal and Pivotal II. Mr. Kam Chung Leung, Mr. Frank Kai Shui Seto, Mr. Vincent Sai Sing Cheung, Mr. Pui Kuen Cheung, Ms. Vanessa Tih Lin Cheung, Mr. Meng Gao, Ms. Heqing Huang and Mr. Chun Wai Nelson Tang are the members of the Executive Committee of NFGHL. The agreement among the Reporting Persons to file this Schedule 13D jointly in accordance with Rule 13d-1(k) of the Securities Exchange Act of 1934, as amended, is attached to Amendment No. 1 to the Schedule 13D as Exhibit 2.

- (f) Pivotal is a Cayman Islands exempted limited partnership. Pivotal II is a Cayman Islands exempted limited partnership. Pivotal I GP is a Cayman Islands exempted limited partnership. Pivotal II GP is a Cayman Islands exempted company. The Ultimate General Partner is a Cayman Islands exempted company. Pivotal Partners is a Cayman Islands exempted company. Pivotal Life Sciences is a Cayman Islands exempted company. Nan Fung Life Sciences, NFIHL and NFGHL are incorporated in the British Virgin Islands. Mr. Kam Chung Leung, Mr. Pui Kuen Cheung, Mr. Meng Gao and Mr. Chun Wai Nelson Tang are citizens of the Hong Kong Special Administrative Region of the People’s Republic of China. Ms. Heqing Huang is a citizen of the People’s Republic of China. Mr. Frank Kai Shui Seto is a citizen of Canada. Mr. Vincent Sai Sing Cheung and Ms. Vanessa Tih Lin Cheung are citizens of the United Kingdom.

Item 5. Interest in Securities of the Issuer

Item 5(a) and 5(c) are amended and restated as follows:

- (a) The information set forth in rows 11 and 13 of the cover pages to this Schedule 13D is incorporated by reference. The percentage set forth in row 13 is based on 61,760,748 outstanding shares of Common Stock, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2023.
- (c) None of the Reporting Persons has effected any transaction in the Common Stock during the last 60 days.

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.

Dated: February 12, 2024

PIVOTAL BIOVENTURE PARTNERS FUND I, L.P.

By: **PIVOTAL BIOVENTURE PARTNERS FUND I G.P., L.P.**
Its General Partner,

By: **PIVOTAL BIOVENTURE PARTNERS FUND I U.G.P. LTD**
Its General Partner,

By: /s/ Robert Hopfner
Robert Hopfner
Authorized Signatory

PIVOTAL BIOVENTURE PARTNERS FUND II, L.P.

By: **PIVOTAL BIOVENTURE PARTNERS FUND II G.P. LTD**
Its General Partner,

By: /s/ Peter Tuxen Bisgaard
Peter Tuxen Bisgaard
Director

PIVOTAL BIOVENTURE PARTNERS FUND II G.P. LTD

By: /s/ Peter Tuxen Bisgaard
Peter Tuxen Bisgaard
Director

PIVOTAL BIOVENTURE PARTNERS FUND I G.P., L.P.

By: **PIVOTAL BIOVENTURE PARTNERS FUND I U.G.P. LTD**
Its General Partner,

By: /s/ Robert Hopfner
Robert Hopfner
Authorized Signatory

PIVOTAL BIOVENTURE PARTNERS FUND I U.G.P. LTD

By: /s/ Robert Hopfner
Robert Hopfner
Authorized Signatory

PIVOTAL PARTNERS LTD

By: /s/ Sun Xintong
Name: Sun Xintong
Title: Director

PIVOTAL LIFE SCIENCES HOLDINGS LIMITED

By: /s/ Sun Xintong
Name: Sun Xintong
Title: Director

NAN FUNG LIFE SCIENCES HOLDINGS LIMITED

By: /s/ Sun Xintong
Sun Xintong
Director

NF INVESTMENT HOLDINGS LIMITED

By: /s/ Tang Chun Wai Nelson
Tang Chun Wai Nelson
Director

NAN FUNG GROUP HOLDINGS LIMITED

By: /s/ Tang Chun Wai Nelson
Tang Chun Wai Nelson
Director