### UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

### **SCHEDULE 13G**

Under the Securities Exchange Act of 1934

(Amendment No. )\*

# Inozyme Pharma, Inc.

(Name of Issuer)

Common stock, \$0.0001 par value per share

(Title of Class of Securities)

45790W108

(CUSIP Number)

December 31, 2020

(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 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 R	EPORTI	NG PERSON(S)					
	New Enterprise Associates 15, L.P.							
2	CHECK THE	APPROI	PRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □				
3	SEC USE ONI	LY						
_								
	CITIZENSHIE		ACE OF ORGANIZATION					
4								
	Delaware limi	ted part	nership					
		5	SOLE VOTING POWER					
			0					
			SHARED VOTING POWER					
	MBER OF	6						
BENI	HARES EFICIALLY		2,437,689 shares					
RE	ED BY EACH PORTING	7	SOLE DISPOSITIVE POWER					
PER	SON WITH		0					
		8	SHARED DISPOSITIVE POWER					
		Ū	2,437,689 shares					
9	AGGREGAT	E AMOU	JNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
	2,437,689 sha	ares						
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES							
11	PERCENTO	FCLAS	S REPRESENTED BY AMOUNT IN ROW (9)					
11	10.4%							
	10.4 %							
12	TYPE OF RE	PORTIN	IG PERSON					
	PN							
<u> </u>								

1	NAMES OF R	EPORT	ING PERSON(S)				
-	NEA Partners 15, L.P.						
2	CHECK THE	APPRO	PRIATE BOX IF A MEMBER OF A GROUP	(a) 🗖 (b) 🗖			
3	SEC USE ONI	LY					
_							
	CITIZENSHII		ACE OF ORGANIZATION				
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	Delaware limi	ited part	Inership				
		5	SOLE VOTING POWER				
			0				
			SHARED VOTING POWER				
NU	MBER OF	6					
	HARES EFICIALLY		2,437,689 shares				
	ED BY EACH PORTING	7	SOLE DISPOSITIVE POWER				
PER	SON WITH		0				
		8	SHARED DISPOSITIVE POWER				
		0	2,437,689 shares				
9	AGGREGAT	E AMOU	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	2,437,689 sha	ares					
10	CHECK BOX	K IF THE	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
	DEDCENT						
11		f CLAS	S REPRESENTED BY AMOUNT IN ROW (9)				
	10.4%						
12	TYPE OF RE	PORTIN	IG PERSON				
	PN						
l							

1	NAMES OF R	EPORT	ING PERSON(S)			
1						
	NEA 15 GP, I	LLC				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP					
-				(b) 🗖		
3	SEC USE ON	LY				
	OTTZENGUU					
4	CITIZENSHI	OK PL	ACE OF ORGANIZATION			
	Delaware limi	ited liab	ility company			
		_	SOLE VOTING POWER			
		5				
			0			
		6	SHARED VOTING POWER			
	MBER OF HARES	Ŭ	2,437,689 shares			
BENI	EFICIALLY					
	ED BY EACH PORTING	7	SOLE DISPOSITIVE POWER			
PERS	SON WITH		0			
		0	SHARED DISPOSITIVE POWER			
		8				
			2,437,689 shares			
9	AGGREGAT	E AMO	I UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
•	2,437,689 sha	ros				
	2,437,007 8112	11 CS				
10	CHECK BOX	K IF THI	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
11	PERCENT O	F CLAS	S REPRESENTED BY AMOUNT IN ROW (9)			
	10.4%					
12	<b>7</b> TYPE OF REPORTING PERSON		JG PERSON			
14						
	00					

1	NAMES OF R	EPORT	NG PERSON(S)			
T	Forest Baskett					
	rorest basket	L				
2	CHECK THE	PRIATE BOX IF A MEMBER OF A GROUP	(a)  (b)  (c)  (c)  (c)  (c)  (c)  (c)  (c)  (c			
				(b) 🗖		
3	SEC USE ONI	LY				
4	CITIZENSHIP	OR PL	ACE OF ORGANIZATION			
4		-				
	United States					
		5	SOLE VOTING POWER			
			0			
			·			
		6	SHARED VOTING POWER			
	MBER OF HARES		2,437,689 shares			
	EFICIALLY ED BY EACH	7	SOLE DISPOSITIVE POWER			
	PORTING SON WITH	/				
			0			
		8	SHARED DISPOSITIVE POWER			
			2,437,689 shares			
	Γ					
9	AGGREGAT	E AMOU	JNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	2,437,689 sha	ires				
10	CHECK BOX	TE THE	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
10	10 CHECK BOX IF THE AGGREGATE A		A CORECTAL AMOUNT IN KOW (7) EXCLODES CERTAIN SHARES			
11	PERCENT O	F CLAS	S REPRESENTED BY AMOUNT IN ROW (9)			
	10.4%					
12	TYPE OF RE	PORTIN	IG PERSON			
	IN					

CUSII	P No. 45790W1(	)8		13G	Page 6 of 18 Pages
1	NAMES OF F Anthony A. F		ING PERSON(S) Jr.		
2	CHECK THE	APPRO	PRIATE BOX IF A MEMB	ER OF A GROUP	(a) □ (b) □
3	SEC USE ONLY				
4	CITIZENSHI United States		ACE OF ORGANIZATION	1	
		5	SOLE VOTING POWE	ER	
NUMBER OF SHARES BENEFICIALLY		6	SHARED VOTING PO 2,437,689 shares	WER	
OWNI RE	ED BY EACH PORTING SON WITH	7	SOLE DISPOSITIVE P	OWER	
		8	SHARED DISPOSITIV 2,437,689 shares	YE POWER	

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	2,437,689 shares
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
12	TYPE OF REPORTING PERSON
	IN

1	NAMES OF REPORTING PERSON(S)				
	Mohamad H.	Makhzo	oumi		
2	CHECK THE	APPROI	PRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □	
3	SEC USE ONI	X			
4	CITIZENSHIP	OR PL	ACE OF ORGANIZATION		
	United States				
		5	SOLE VOTING POWER		
			0		
		6	SHARED VOTING POWER		
S	MBER OF HARES EFICIALLY		2,437,689 shares		
OWNE REI	ED BY EACH PORTING	7	SOLE DISPOSITIVE POWER		
PER	SON WITH		0		
		8	SHARED DISPOSITIVE POWER		
			2,437,689 shares		
9	AGGREGAT	E AMOU	JNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
	2,437,689 sha	ires			
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
11	PERCENT O	F CLAS	S REPRESENTED BY AMOUNT IN ROW (9)		
	10.4%				
12	TYPE OF RE	PORTIN	IG PERSON		
	IN				

1	NAMES OF R	AMES OF REPORTING PERSON(S)					
	Joshua Makov	wer					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP						
3	SEC USE ONLY						
4	CITIZENSHIF United States	OR PL	ACE OF ORGANIZATION				
		5	SOLE VOTING POWER 0				
S	MBER OF HARES EFICIALLY	6	SHARED VOTING POWER 2,437,689 shares				
RE	ED BY EACH PORTING SON WITH	7	SOLE DISPOSITIVE POWER 0				
		8	SHARED DISPOSITIVE POWER 2,437,689 shares				
9	AGGREGAT		UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES						
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.4%						
12	TYPE OF REPORTING PERSON IN						

1	NAMES OF R	EPORT	NG PERSON(S)				
1	Scott D. Sandell						
2	CHECK THE	APPRO	PRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □			
3	SEC USE ONI	LY					
	CITIZENSHIE		ACE OF ORGANIZATION				
4		UK FL.	ACE OF OKDANIZATION				
	United States						
		5	SOLE VOTING POWER				
			0				
			SHARED VOTING POWER				
NUN	BER OF						
	HARES EFICIALLY		2,437,689 shares				
	ED BY EACH PORTING	7	SOLE DISPOSITIVE POWER				
PER	SON WITH		0				
		8	SHARED DISPOSITIVE POWER				
			2,437,689 shares				
9	AGGREGAT	E AMOU	JNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	2,437,689 sha	ires					
10	CHECK BOX	IF THE	AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
_							
11	PERCENTO	FCLAS	S REPRESENTED BY AMOUNT IN ROW (9)				
11		LAS	$\mathcal{F}_{\mathcal{F}} = \mathcal{F}_{\mathcal{F}} = $				
	10.4%						
12	TYPE OF RE	PORTIN	G PERSON				
	IN						

1	NAMES OF R	EPORT	ING PERSON(S)				
1	Peter W. Sons						
	reter w. sons	1111					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP						
				(b) 🗖			
3	SEC USE ONI	_Y					
4	CITIZENSHIP	OR PL	ACE OF ORGANIZATION				
-	United States						
	Omteu States						
		5	SOLE VOTING POWER				
			0				
NILL	MBER OF	6	SHARED VOTING POWER				
S	HARES		2,437,689 shares				
OWNI	EFICIALLY ED BY EACH	7	SOLE DISPOSITIVE POWER				
	PORTING SON WITH	/	0				
		8	SHARED DISPOSITIVE POWER				
			2,437,689 shares				
9	AGGREGAT	E AMOU	JNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	2,437,689 sha	ires					
10	CHECK BOX	IF THE	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
10							
11	PERCENT O	F CLAS	S REPRESENTED BY AMOUNT IN ROW (9)				
	10.4%						
10	TYPE OF RE	ρωστιν	IG PERSON				
12		IUKIIN	I LEDON				
	IN						
	1						

Item 1(a).	Name of Issuer:
	Inozyme Pharma, Inc. (the "Issuer").
Item 1(b).	Address of Issuer's Principal Executive Offices:
	321 Summer Street, Suite 400, Boston, Massachusetts 02210.
Item 2(a).	Names of Persons Filing:
	This statement is being filed by New Enterprise Associates 15, L.P. ("NEA 15"); NEA Partners 15, L.P. ("NEA Partners 15"), which is the sole general partner of NEA 15; NEA 15 GP, LLC ("NEA 15 GP"), which is the sole general partner of NEA Partners 15; and Forest Baskett ("Baskett"), Anthony A. Florence, Jr. ("Florence"), Mohamad H. Makhzoumi ("Makhzoumi"), Joshua Makower ("Makower"), Scott D. Sandell ("Sandell") and Peter W. Sonsini ("Sonsini") (collectively, the "Managers"). The Managers are the managers of NEA 15 GP. NEA 15, NEA 15 GP and the Managers are sometimes referred to collectively herein as the "Reporting Persons".
Item 2(b).	Address of Principal Business Office or, if none, Residence:
	The address of the principal business office of NEA 15, NEA Partners 15, NEA 15 GP and Sandell is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093. The address of the principal business office of Baskett, Makhzoumi, Makower, and Sonsini is New Enterprise Associates, 2855 Sand Hill Road, Menlo Park, California 94025. The address of the principal business office of Florence is New Enterprise Associates, 104 5 <sup>th</sup> Avenue, 19th Floor, New York, NY 10001.
Item 2(c).	<u>Citizenship:</u>
	Each of NEA 15 and NEA Partners 15 is a Delaware limited partnership. NEA 15 GP is a Delaware limited liability company. Each of the Managers is a United States citizen.
Item 2(d).	Title of Class of Securities.
	Common stock, \$0.0001 par value ("Common Stock").
Item 2(e).	CUSIP Number.
	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:
	Not Applicable.

### Item 4. <u>Ownership:</u>

- (a) Amount Beneficially Owned: NEA 15 is the record owner of 2,437,689 shares of Common Stock as of December 31, 2020 (the "Shares"). As the sole general partner of NEA 15, NEA Partners 15 may be deemed to own beneficially the Shares. As the sole general partner of NEA Partners 15, NEA 15 GP likewise may be deemed to own beneficially the Shares. As the individual Managers of NEA 15 GP, each of the Managers also may be deemed to own beneficially the Shares.
- (b) Percent of Class: See Line 11 of cover sheets. The percentages set forth on the cover sheet for each Reporting Person are calculated based on 23,372,844 shares of Common Stock reported by the Issuer to be outstanding as of November 6, 2020 on the Issuer's Form 10-Q filed with the Securities and Exchange Commission on November 12, 2020.
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or to direct the vote: See Line 5 of the cover sheets.
  - (ii) Shared power to vote or to direct the vote: See Line 6 of the cover sheets.
  - (iii) Sole power to dispose or to direct the disposition of: See Line 7 of the cover sheets.
  - (iv) Shared power to dispose or to direct the disposition of: See Line 8 of the cover sheets.

Each Reporting Person disclaims beneficial ownership of such Securities except for the shares, if any, such Reporting Person holds of record.

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

Not applicable.

#### Item 6. <u>Ownership of More than Five Percent on Behalf of Another Person.</u>

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. The Reporting Persons expressly disclaim membership in a "group" as used in Rule 13d-5(b).

Item 9. Notice of Dissolution of Group.

Not applicable.

#### Item 10. <u>Certification.</u>

Not applicable. This Schedule 13G is not filed pursuant to Rule 13d-1(b) or Rule 13d-1(c).

#### Material to be Filed as Exhibits.

Exhibit 1 – Agreement regarding filing of joint Schedule 13G.

Exhibit 2 - Power of Attorney regarding filings under the Securities Exchange Act of 1934, as amended.

### **SIGNATURE**

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

EXECUTED this 12<sup>th</sup> day of February, 2021.

NEW ENTERPRISE ASSOCIATES 15, L.P.

By: NEA PARTNERS 15, L.P. General Partner

> By: NEA 15 GP, LLC General Partner

> > By: \*

Louis S. Citron Chief Legal Officer

#### NEA PARTNERS 15, L.P.

By: NEA 15 GP, LLC General Partner

By: \* Louis S. Citron Chief Legal Officer

### NEA 15 GP, LLC

By: \* Louis S. Citron Chief Legal Officer

\* Forest Baskett

\* Anthony A. Florence, Jr.

\* Mohamad H. Makhzoumi

\* Joshua Makower

\* Scott D. Sandell

Peter W. Sonsini

<u>\*/s/ Sasha O. Keough</u> Sasha O. Keough As attorney-in-fact

This Schedule 13G was executed by Sasha O. Keough on behalf of the individuals listed above pursuant to a Power of Attorney, a copy of which is attached as Exhibit 2.

#### EXHIBIT 1

#### **AGREEMENT**

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of shares of stock of Inozyme Pharma, Inc.

EXECUTED this 12<sup>th</sup> day of February, 2021.

NEW ENTERPRISE ASSOCIATES 15, L.P.

- By: NEA PARTNERS 15, L.P. General Partner
  - By: NEA 15 GP, LLC General Partner

By: <u>\*</u> Louis S. Citron Chief Legal Officer

#### NEA PARTNERS 15, L.P.

By: NEA 15 GP, LLC General Partner

By: \* Louis S. Citron Chief Legal Officer

#### NEA 15 GP, LLC

By: \* Louis S. Citron Chief Legal Officer

\* Forest Baskett

\* Anthony A. Florence, Jr.

\* Mohamad H. Makhzoumi

\*

Joshua Makower

\*

Scott D. Sandell

\* Peter W. Sonsini

> <u>\*/s/ Sasha O. Keough</u> Sasha O. Keough As attorney-in-fact

This Agreement was executed by Sasha O. Keough on behalf of the individuals listed above pursuant to a Power of Attorney a copy of which is attached as Exhibit 2.

### EXHIBIT 2

#### **POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Louis S. Citron, Timothy Schaller, Sasha Keough and Stephanie Brecher, and each of them, with full power to act without the others, his or her true and lawful attorney-in-fact, with full power of substitution, to sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of himself as an individual or in his or her capacity as a direct or indirect general partner, director, officer or manager of any partnership, corporation or limited liability company, pursuant to section 13 or 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and with any other entity when and if such is mandated by the Exchange Act or by the Financial Industry Regulatory Authority, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as he or she might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or his or her substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 13th day of March, 2017.

<u>/s/ M. James Barrett</u> M. James Barrett

/s/ Peter J. Barris Peter J. Barris

/s/ Forest Baskett Forest Baskett

<u>/s/ Ali Behbahani</u> Ali Behbahani

/s/ Colin Bryant Colin Bryant

<u>/s/ Carmen Chang</u> Carmen Chang

<u>/s/ Anthony A. Florence, Jr.</u> Anthony A. Florence, Jr.

<u>/s/ Carol G. Gallagher</u> Carol G. Gallagher

<u>/s/ Dayna Grayson</u> Dayna Grayson

/s/ Patrick J. Kerins Patrick J. Kerins <u>/s/ P. Justin Klein</u> P. Justin Klein

<u>/s/ Vanessa Larco</u> Vanessa Larco

<u>/s/ Joshua Makower</u> Joshua Makower

<u>/s/ Mohamad H. Makhzoumi</u> Mohamad H. Makhzoumi

/s/ Edward T. Mathers Edward T. Mathers

/s/ David M. Mott David M. Mott

/s/ Sara M. Nayeem Sara M. Nayeem

/s/ Jason R. Nunn Jason R. Nunn

<u>/s/ Gregory Papadopoulos</u> Gregory Papadopoulos

<u>/s/ Chetan Puttagunta</u> Chetan Puttagunta

<u>/s/ Jon Sakoda</u> Jon Sakoda

/s/ Scott D. Sandell Scott D. Sandell

/s/ A. Brooke Seawell A. Brooke Seawell

/s/ Peter W. Sonsini Peter W. Sonsini

/s/ Melissa Taunton Melissa Taunton

<u>/s/ Frank M. Torti</u> Frank M. Torti

<u>/s/ Ravi Viswanathan</u> Ravi Viswanathan

/s/ Paul E. Walker Paul E. Walker

<u>/s/ Rick Yang</u> Rick Yang