UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13

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

Amylyx Pharmaceuticals, Inc.

(Name of Issuer)

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

03237H101 (CUSIP Number)

August 14, 2024 (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.	. NAMES OF REPORTING PERSONS					
	TCC Communication of the LLC					
2.	TCG Crossover GP II, LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)					
		(b) [
2						
3.	SEC USE ONLY					
4.	CITIZENSHIP OR PLACE OF ORGANIZATION					
	Delaware					
l.		5.	SOLE VOTING POWER			
NI	MBER OF		0			
S	HARES	6.	SHARED VOTING POWER			
	EFICIALLY WNED BY		4,643,812 (1)			
EACH REPORTING		7.	SOLE DISPOSITIVE POWER			
PERSON			0			
WITH		8.	SHARED DISPOSITIVE POWER			
			4,643,812 (1)			
9.	AGGREG	ATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	4,643,812	(1)				
10.						
	п					
11.	_	OF (CLASS REPRESENTED BY AMOUNT IN ROW (9)			
	6.89/ (2)					
12.	6.8% (2) TYPE OF REPORTING PERSON (see instructions)					
	OO					

- (1) These securities are held of record by TCG Crossover II (as defined in Item 2(a) below). TCG Crossover GP II (as defined in Item 2(a) below) is the general partner of TCG Crossover II and may be deemed to have voting, investment, and dispositive power with respect to these securities. Chen Yu is the sole managing member of TCG Crossover GP II and may be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Based on 68,082,468 shares of Common Stock outstanding as of July 31, 2024, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 8, 2024 (the "Form 10-Q").

1.	NAMES OF REPORTING PERSONS					
	TCG Crossover Fund II, L.P.					
2.	 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) □ (b) ⋈ 					
	(a) ⊔	(0) 1				
3.	SEC USE ONLY					
4.	CITIZENSHIP OR PLACE OF ORGANIZATION					
	Delaware	5.	SOLE VOTING POWER			
			0			
NUMBER OF SHARES		6.	SHARED VOTING POWER			
BEN	EFICIALLY		4 (42 010 (1)			
OWNED BY EACH REPORTING		7.	4,643,812 (1) SOLE DISPOSITIVE POWER			
PERSON WITH		8	0 SHARED DISPOSITIVE POWER			
		o.				
9. AGGREG		ΛTE	4,643,812 (1) AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
<i>)</i> .			ANOUNT BENEFICIALLY OWNED BY EACH REPORTING LEASON			
10.	4,643,812 (1)					
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)					
11						
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)					
10	6.8% (2)					
12.	. TYPE OF REPORTING PERSON (see instructions)					
	PN					

(1) These securities are held of record by TCG Crossover II. TCG Crossover GP II is the general partner of TCG Crossover II and may be deemed to have voting, investment, and dispositive power with respect to these securities. Chen Yu is the sole managing member of TCG Crossover GP II and may be deemed to share voting, investment and dispositive power with respect to these securities.

(2) Based on 68,082,468 shares of Common Stock outstanding as of July 31, 2024, as reported by the Issuer in its Form 10-Q.

CUSIP No. 03237H101	13G
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1.	NAMES OF REPORTING PERSONS					
	Chen Yu					
2.	 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) □ (b) ☒ 					
	(a) ⊔	(0) 1				
3.	. SEC USE ONLY					
4.	CITIZENSHIP OR PLACE OF ORGANIZATION					
	United States of America					
		5.	SOLE VOTING POWER			
NUMBER OF			0			
	HARES	6.	SHARED VOTING POWER			
	BENEFICIALLY OWNED BY		4,643,812 (1)			
EACH REPORTING PERSON		7.	SOLE DISPOSITIVE POWER			
			0			
WITH		8.	SHARED DISPOSITIVE POWER			
			4,643,812 (1)			
9.	AGGREG.	ATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	4,643,812	(1)				
10.	. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)					
11.	PERCENT	OF 0	CLASS REPRESENTED BY AMOUNT IN ROW (9)			
	6.8% (2)					
12.	TYPE OF	REP	ORTING PERSON (see instructions)			
	IN					

(1) These securities are held of record by TCG Crossover II. TCG Crossover GP II is the general partner of TCG Crossover II and may be deemed to have voting, investment, and dispositive power with respect to these securities. Chen Yu is the sole managing member of TCG Crossover GP II and may be deemed to share voting, investment and dispositive power with respect to these securities.

Based on 68,082,468 shares of Common Stock outstanding as of July 31, 2024, as reported by the Issuer in its Form 10-Q.

Item 1(a). Name of Issuer:

Amylyx Pharmaceuticals, Inc. (the "Issuer").

Item 1(b). Address of Issuer's Principal Executive Offices:

43 Thorndike St.

Cambridge, Massachusetts 02141

Item 2(a). Name of Person Filing:

This joint statement on Schedule 13G is being filed by TCG Crossover Fund II, L.P. ("<u>TCG Crossover II</u>"), TCG Crossover GP II, LLC ("<u>TCG Crossover II</u>" and together with TCG Crossover II, the "<u>Reporting Entities</u>") and Chen Yu (the "<u>Reporting Individual</u>"). The Reporting Entities and the Reporting Individual are collectively referred to as the "<u>Reporting Persons</u>." The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G. The agreement among the Reporting Persons to file jointly in accordance with the provisions of Rule 13d-1(k)(1) under the Act is attached to this Statement as <u>Exhibit 1</u>. Other than those securities reported herein as being held directly by such Reporting Person, each Reporting Person disclaims beneficial ownership of all securities reported in this Statement except to the extent of such Reporting Person's pecuniary interest therein.

Item 2(b) Address of Principal Business Office, or if None, Residence:

The address of the principal business office of each Reporting Person is 705 High St., Palo Alto, CA 94301.

Item 2(c). Citizenship:

TCG Crossover GP II is a limited liability company organized under the laws of the State of Delaware. TCG Crossover II is a limited partnership organized under the laws of the State of Delaware. The Reporting Individual is a citizen of the United States of America.

Item 2(d). Title of Class of Securities:

Common Stock, \$0.0001 par value per share ("Common Stock").

Item 2(e). CUSIP Number:

03237H101

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. Ownership.

(a) Amount beneficially owned:

See Row 9 of the cover page for each Reporting Person and the corresponding footnotes.*

(b) Percent of class:

See Row 11 of the cover page for each Reporting Person and the corresponding footnotes.*

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

See Row 5 of the cover page for each Reporting Person and the corresponding footnotes.*

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

See Row 6 of the cover page for each Reporting Person and the corresponding footnotes.*

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

See Row 7 of the cover page for each Reporting Person and the corresponding footnotes.*

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

See Row 8 of the cover page for each Reporting Person and the corresponding footnotes.*

* Except to the extent of his or its pecuniary interest therein, each Reporting Person disclaims beneficial ownership of such shares of Common Stock, 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. Ownership of More Than Five Percent on Behalf of Another Person.

Under certain circumstances set forth in the limited partnership agreement of TCG Crossover II and the limited liability company agreement of TCG Crossover GP II, the general and limited 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 securities of the Issuer owned by each such entity of which they are a partner or member, as the case may be.

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.

Item 9. Notice of Dissolution of the Group.

Not applicable.

Item 10. Certifications.

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 Rule 14a-11 promulgated under the Act.

Material to be Filed as Exhibits.

Exhibit 1 – Joint Filing Agreement.

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: August 26, 2024

TCG Crossover Fund II, L.P.

By: TCG Crossover GP II, LLC

Its: General Partner

By: /s/ Craig Skaling

Authorized Signatory

TCG Crossover GP II, LLC

By: /s/ Craig Skaling

Authorized Signatory

/s/ Craig Skaling, as attorney-in-fact for Chen Yu

Chen Yu

JOINT FILING AGREEMENT

The undersigned hereby agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned, and any amendments thereto executed by the undersigned shall be filed on behalf of each of the undersigned without the necessity of filing any additional joint filing agreement. The undersigned acknowledge that each is responsible for the timely filing of such statement on Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning him, her or it contained therein, but shall not be responsible for the completeness or accuracy of the information concerning the others of the undersigned, except to the extent that it knows or has reason to believe that such information is inaccurate or incomplete. This Joint Filing Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

Dated: August 26, 2024

TCG Crossover Fund II, L.P.

By: TCG Crossover GP II, LLC

Its: General Partner

By: /s/ Craig Skaling
Authorized Signatory

TCG Crossover GP II, LLC

By: /s/ Craig Skaling
Authorized Signatory

/s/ Craig Skaling, as attorney-in-fact for Chen Yu

Chen Yu