UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 11)*

VENTYX BIOSCIENCES, INC.

(Name of Issuer)

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

> 92332V107 (CUSIP Number)

Somasundaram Subramaniam New Science Ventures 500 West Putnam Avenue, Suite 400 Greenwich, CT 06830 (212) 688-5100

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

with a copy to:

Leland S. Benton Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue, NW Washington, DC 20004 (202) 739-3000

June 24, 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 §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 ("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					
	NSV Investments I, L.P.					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP					
	(a) \Box (b) \Box					
3	SEC USE ONLY					
4	SOURCE OF FUNDS (See Instructions)					
	WC, AF					
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)					
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
	Delaware					
	Delaware	7	SOLE VOTING POWER			
	NUMBER OF	8	0 SHARED VOTING POWER			
	SHARES	Ŭ				
	BENEFICIALLY		4,878,420			
	OWNED BY EACH REPORTING	9	SOLE DISPOSITIVE POWER			
	PERSON WITH:		0			
		10	SHARED DISPOSITIVE POWER			
			4,878,420			
11	AGGREGATE AMOUNT B	ENEFICI	ALLY OWNED BY EACH REPORTING PERSON			
	4,878,420					
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)					
13	PERCENT OF CLASS REPI	RESENT	ED BY AMOUNT IN ROW (11)			
	6.00/					
14	6.9% TYPE OF REPORTING PERSON					
	PN					

1	NAME OF REPORTING PERSONS					
	NSV Partners III, L.P.					
2	CHECK THE APPROPRIAT	E BOX I	F A MEMBER OF A GROUP			
	(a) (b) (c)					
3	SEC USE ONLY					
_						
4	SOURCE OF FUNDS (See Instructions)					
-	SOURCE OF FONDS (See instructions)					
	AF					
5	CHECK BOX IF DISCLOSU	RE OF I	LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
	Delaware					
		7	SOLE VOTING POWER			
			0			
	NUMBER OF	8	SHARED VOTING POWER			
	SHARES					
	BENEFICIALLY OWNED BY EACH	9	6,260,026 SOLE DISPOSITIVE POWER			
	REPORTING					
	PERSON WITH:	10	0 CHADED DISDOSITIVE DOWED			
		10	SHARED DISPOSITIVE POWER			
	-		6,260,026			
11	AGGREGATE AMOUNT BE	ENEFICI	ALLY OWNED BY EACH REPORTING PERSON			
	6,260,026					
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)					
13	PERCENT OF CLASS REPR	ESENT	ED BY AMOUNT IN ROW (11)			
	8.9%					
14	8.9% TYPE OF REPORTING PERSON					
	PN					

1	NAME OF REPORTING PERSONS					
	NSV Partners III GP, LLC					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP					
	(a) (b) (c)					
3	SEC USE ONLY					
4	SOURCE OF FUNDS (See Instructions)					
	AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)					
5	\Box	KE OF I	LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO TIEM 2(d) OR 2(e)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
	Delaware					
		7	SOLE VOTING POWER			
			0			
	NUMBER OF	8	SHARED VOTING POWER			
	SHARES					
	BENEFICIALLY OWNED BY EACH	9	6,260,026 SOLE DISPOSITIVE POWER			
	REPORTING	-				
	PERSON WITH:	10	0 SHARED DISPOSITIVE POWER			
		10	SHARED DISPOSITIVE POWER			
			6,260,026			
11	AGGREGATE AMOUNT BE	ENEFICI	ALLY OWNED BY EACH REPORTING PERSON			
	6,260,026					
12	CHECK BOX IF THE AGGE	REGATE	AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)			
13	PERCENT OF CLASS REPR	ESENT	ED BY AMOUNT IN ROW (11)			
	<u> 00/</u>					
14	8.9% TYPE OF REPORTING PERSON					
	00					

1	NAME OF REPORTING PERSONS					
	Somasundaram Subramaniam					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP					
	(a) (b) (c)					
3	SEC USE ONLY					
4	SOURCE OF FUNDS (See Instructions)					
5	AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)					
5	\Box					
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
0	CITIZENSIIP OK PLACE C	of OKOA	ANIZATION			
	USA					
		7	SOLE VOTING POWER			
			0			
	NUMBER OF	8	SHARED VOTING POWER			
	SHARES					
	BENEFICIALLY OWNED BY EACH	9	7,102,969 SOLE DISPOSITIVE POWER			
	REPORTING	,	SOLE DISCOSITIVE FOWER			
	PERSON WITH:		0			
		10	SHARED DISPOSITIVE POWER			
			7,102,969			
11	AGGREGATE AMOUNT BE	ENEFICI	ALLY OWNED BY EACH REPORTING PERSON			
	7,102,969					
12		REGATE	AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)			
		_				
13	DEPCENT OF CLASS DEDD	ESENT	ED BY AMOUNT IN ROW (11)			
15	I ERCENT OF CLASS KEPK	LOENI.				
	10.1%					
14	TYPE OF REPORTING PER	TYPE OF REPORTING PERSON				
	IN					
ı						

This Amendment No. 11 ("Amendment No. 11") amends the Statement of Beneficial Ownership on Schedule 13D jointly filed with the Securities and Exchange Commission (the "Commission") by NSV Investments I, L.P., a Delaware limited partnership, NSV Partners III, L.P., a Delaware limited partnership, NSV Partners III GP, LLC, a Delaware limited liability company and Somasundaram Subramaniam, a United States citizen (collectively, the "Reporting Persons"), on October 29, 2021, and amended on September 21, 2022, December 16, 2022, December 30, 2022, March 2, 2023, April 6, 2023, July 11, 2023, July 19, 2023, March 8, 2024, and on March 13, 2024 (as amended, the "Schedule 13D"), with respect to the shares of common stock, par value \$0.0001 per share ("Common Stock"), of Ventyx Biosciences, Inc. (the "Issuer"). Except as specifically provided herein, this Amendment No. 11 does not modify any of the information previously reported in the Schedule 13D, which remains unchanged.

Item 4. Purpose of Transaction

Item 4 of the Schedule 13D is hereby amended and supplemented by adding the following at the end of Item 4:

On April 9, 2024, NSV Investments III, L.P. which holds certain shares beneficially owned by the Reporting Persons, authorized the distribution of 695,339 shares of Common Stock to its limited partners (the "April Distribution").

Additionally, on June 24, 2024, each of (i) NSV Investments I, L.P., (ii) NSV Investments II, L.P., and (iii) NSV Investments III, L.P., which hold certain shares beneficially owned by the Reporting Persons, authorized the distribution of shares of Common Stock to their respective limited partners as follows (together with the April Distribution, the "NSV Distributions"):

- (i) NSV Investments I, L.P. distributed 125,651 shares of Common Stock,
- (ii) NSV Investments II, L.P. distributed 232,180 shares of Common Stock, and
- (iii) NSV Investments III, L.P. distributed 283,496 shares of Common Stock.

As a result of the NSV Distributions, neither NSV Investments II, L.P. nor NSV Investments III, L.P. holds any shares of Common Stock.

Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule 13D is hereby amended as follows:

(a-b) As of June 26, 2024, the Reporting Persons may be deemed to beneficially own, in the aggregate, 7,102,969 shares of Common Stock, representing approximately 10.1% of the Issuer's outstanding shares of Common Stock, based on 70,499,201 shares of Common Stock outstanding as of April 11, 2024, as disclosed in the Issuer's Current Report on Form 8-K filed with the Commission on June 6, 2024.

Somasundaram Subramaniam has the sole power to vote or direct the vote of 0 shares; has the shared power to vote or direct the vote of 7,102,969 shares; has the sole power to dispose or direct the disposition of 0 shares; and has the shared power to dispose or direct the disposition of 7,102,969 shares.

Mr. Subramaniam is the majority member and managing member of NSV Partners II, LLC, and may be deemed to share with NSV Partners II, LLC voting and dispositive power over the 408,520 shares owned by NSV Partners II, LLC, constituting 0.6% of the Issuer's shares outstanding based upon 70,499,201 shares outstanding.

Mr. Subramaniam is the majority member and managing member of NSV Partners III GP, LLC, and may be deemed to share with NSV Partners III GP, LLC and NSV Partners III, L.P. voting and dispositive power over (i) the 1,381,606 shares owned by NSV Partners III, L.P., and (ii) the 4,878,420 shares owned by NSV Investments I, L.P., of which NSV Partners III, L.P. is the general partner, or an aggregate of 6,260,026 shares, constituting 8.9% of the Issuer's shares outstanding based on 70,499,201 shares outstanding. NSV Partners III GP, LLC is the general partner of NSV Partners III, L.P.

Mr. Subramaniam is the majority member and managing member of New Science Ventures, LLC, and may be deemed to share voting and dispositive power over the shares owned by New Science Ventures, LLC, or 434,423 shares, constituting 0.6% of the Issuer's shares outstanding based upon 70,499,201 shares outstanding. The shares beneficially owned by the Reporting Persons consist of: (i) 4,878,420 shares owned by NSV Investments I, L.P., (ii) 1,381,606 shares owned by NSV Partners, III, L.P., (iii) 434,423 shares owned by New Science Ventures, LLC, and (iv) 408,520 shares owned by NSV Partners II, LLC.

(c-e) Not applicable.

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.

Date: June 26, 2024

*

NSV Investments I, L.P. By: /s/ Tom Lavin Tom Lavin Name: Title: Partner NSV Partners III, L.P. By: /s/ Tom Lavin Name: Tom Lavin Title: Partner NSV Partners III GP, LLC By: /s/ Tom Lavin Name: Tom Lavin Title: Partner Somasundaram Subramaniam By: /s/ Somasundaram Subramaniam*

Somasundaram Subramaniam

This reporting person disclaims beneficial ownership of these reported securities except to the extent of his pecuniary interest therein, and this report shall not be deemed an admission that he is the beneficial owner of these securities for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, or for any other purpose.

Name:

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (see 18 U.S.C. 10001).