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

#### SCHEDULE 13G/A

### Under the Securities Exchange Act of 1934 (Amendment No. 1)\*

# 4D Molecular Therapeutics, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

#### 35104E100

(CUSIP Number)

#### December 31, 2023

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- $\Box$  Rule 13d-1(b)
- $\boxtimes$  Rule 13d-1(c)
- $\square$  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.	1. Names of Reporting Persons		Persons		
	Venrock Healthcare Capital Partners III, L.P.				
2.	Check the A	Appropriate Box if a Member of a Group (See Instructions)			
	(a) ⊠ (1) (	(b) 🗆			
3.	SEC Use O	nly			
4.	Citizenship	or Place o	f Organization		
	Delaware				
		5.	Sole Voting Power		
			0		
Number of Shares	of	6.	Shared Voting Power		
Beneficial Owned by			4,400,000 (2)		
Each Reporting		7.	Sole Dispositive Power		
Person W			0		
		8.	Shared Dispositive Power		
			4,400,000 (2)		
9.	Aggregate A	Amount B	eneficially Owned by Each Reporting Person		
	4,400,000 (2	2)			
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)				
11.	Percent of C	Class Repr	esented by Amount in Row (9)		
	8.9% (3)	8.9% (3)			
12.	Type of Rep	porting Per	rson (See Instructions)		
	PN				

(1) Venrock Healthcare Capital Partners III, L.P., VHCP Co-Investment Holdings III, LLC, Venrock Healthcare Capital Partners EG, L.P., VHCP Management III, LLC, VHCP Management EG, LLC, Nimish Shah and Bong Koh are members of a group for the purposes of this Schedule 13G/A.

(2) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P.; (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC; and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P.

1.	Names of Re	eporting P	ersons		
	VHCP Co-Investment Holdings III, LLC				
2.	Check the A	Appropriate Box if a Member of a Group (See Instructions)			
	(a) $\boxtimes$ (1) (b) $\square$				
3.	SEC Use On	ıly			
4.	Citizenship o	or Place o	f Organization		
	Delaware				
		5.	Sole Voting Power		
			0		
Number of Shares	of	6.	Shared Voting Power		
Beneficia Owned by			4,400,000 (2)		
Each		7.	Sole Dispositive Power		
Reporting Person W			0		
		8.	Shared Dispositive Power		
			4,400,000 (2)		
9.	Aggregate A	mount Be	eneficially Owned by Each Reporting Person		
	4,400,000 (2)				
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)				
11.	Percent of Class Represented by Amount in Row (9)				
	8.9% (3)				
12.	Type of Rep	orting Per	son (See Instructions)		
	00	00			

(1) Venrock Healthcare Capital Partners III, L.P., VHCP Co-Investment Holdings III, LLC, Venrock Healthcare Capital Partners EG, L.P., VHCP Management III, LLC, VHCP Management EG, LLC, Nimish Shah and Bong Koh are members of a group for the purposes of this Schedule 13G/A.

(2) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P.; (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC; and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P.

1.	Names of F	Reporting P	Persons			
	Venrock He	ealthcare C	apital Partners EG, L.P.			
2.	Check the	Appropriate Box if a Member of a Group (See Instructions)				
	(a) $\boxtimes$ (1) (b) $\square$					
3.	SEC Use O	SEC Use Only				
4.	Citizenship	or Place o	f Organization			
	Delaware					
		5.	Sole Voting Power			
			0			
Number of Shares	of	6.	Shared Voting Power			
Beneficia Owned by			4,400,000 (2)			
Each		7.	Sole Dispositive Power			
Reporting Person W			0			
		8.	Shared Dispositive Power			
			4,400,000 (2)			
9.	Aggregate	Amount Be	eneficially Owned by Each Reporting Person			
	4,400,000 (2)					
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)					
11.	Percent of	Class Repr	esented by Amount in Row (9)			
	8.9% (3)					
12.	12. Type of Reporting Person (See Instructions)		rson (See Instructions)			
	PN					

- (1) Venrock Healthcare Capital Partners III, L.P., VHCP Co-Investment Holdings III, LLC, Venrock Healthcare Capital Partners EG, L.P., VHCP Management III, LLC, VHCP Management EG, LLC, Nimish Shah and Bong Koh are members of a group for the purposes of this Schedule 13G/A.
- (2) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P.; (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC; and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P.
- (3) This percentage is calculated based on 49,338,467 shares of common stock outstanding as of February 9, 2024 as disclosed in the Issuer's prospectus supplement dated February 6, 2024 filed with the Securities and Exchange Commission on February 8, 2024.

1.	Names of I	Reporting Persons			
	VHCP Management III, LLC				
2.	Check the	Appropriate Box if a Member of a Group (See Instructions)			
	(a) ⊠ (1) (b) □				
3.	SEC Use C	only			
4.	Citizenship	or Place of Organization			
	Delaware				
		5. Sole Voting Power			
		0			
Number of	of	6. Shared Voting Power			
Shares Beneficia		4,400,000 (2)			
Owned by Each		7. Sole Dispositive Power			
Reporting Person W		0			
		8. Shared Dispositive Power			
		4,400,000 (2)			
9.	Aggregate	Amount Beneficially Owned by Each Reporting Person			
	4,400,000	4,400,000 (2)			
10.					
11.	11. Percent of Class Represented by Amount in Row (9)				
	8.9% (3)	8.9% (3)			
12.	Type of Reporting Person (See Instructions)				
	00				
<u> </u>					

- (1) Venrock Healthcare Capital Partners III, L.P., VHCP Co-Investment Holdings III, LLC, Venrock Healthcare Capital Partners EG, L.P., VHCP Management III, LLC, VHCP Management EG, LLC, Nimish Shah and Bong Koh are members of a group for the purposes of this Schedule 13G/A.
- (2) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P.; (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC; and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P.
- (3) This percentage is calculated based on 49,338,467 shares of common stock outstanding as of February 9, 2024 as disclosed in the Issuer's prospectus supplement dated February 6, 2024 filed with the Securities and Exchange Commission on February 8, 2024.

1.	Names of Repor	ting Persons		
	VHCP Management EG, LLC			
2.	Check the Appro	Check the Appropriate Box if a Member of a Group (See Instructions)		
	(a) ⊠ (1) (b) □			
3.	SEC Use Only			
4.	Citizenship or P	lace of Organization		
	Delaware			
		5. Sole Voting Power		
		0		
Number o Shares	of	6. Shared Voting Power		
Beneficial Owned by		4,400,000 (2)		
Each		7. Sole Dispositive Power		
Reporting Person W		0		
		8. Shared Dispositive Power		
		4,400,000 (2)		
9.	Aggregate Amo	unt Beneficially Owned by Each Reporting Person		
	4,400,000 (2)			
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)			
11.	Percent of Class	Represented by Amount in Row (9)		
	8.9% (3)			
12.	Type of Reporting Person (See Instructions)			
	00			

(1) Venrock Healthcare Capital Partners III, L.P., VHCP Co-Investment Holdings III, LLC, Venrock Healthcare Capital Partners EG, L.P., VHCP Management III, LLC, VHCP Management EG, LLC, Nimish Shah and Bong Koh are members of a group for the purposes of this Schedule 13G/A.

(2) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P.; (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC; and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P.

1.	Names of Reporting Persons					
	Shah, Nimish					
2.	Check the Approp	Check the Appropriate Box if a Member of a Group (See Instructions)				
	(a) $\boxtimes$ (1) (b) $\square$					
3.	SEC Use Only					
4.	Citizenship or Pla	ice of Organization				
	United States					
		5. Sole Voting Power				
		0				
Number o Shares	f	6. Shared Voting Power				
Beneficial Owned by		4,400,000 (2)				
Each		7. Sole Dispositive Power				
Reporting Person W		0				
		8. Shared Dispositive Power				
		4,400,000 (2)				
9.	Aggregate Amour	nt Beneficially Owned by Each Reporting Person				
	4,400,000 (2)					
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)					
	8.9% (3)					
12.	Type of Reporting Person (See Instructions)					
	IN					

(1) Venrock Healthcare Capital Partners III, L.P., VHCP Co-Investment Holdings III, LLC, Venrock Healthcare Capital Partners EG, L.P., VHCP Management III, LLC, VHCP Management EG, LLC, Nimish Shah and Bong Koh are members of a group for the purposes of this Schedule 13G/A.

(2) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P.; (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC; and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P.

1.	Names of R	eporting I	Persons		
	Koh, Bong				
2.	Check the A	Appropriate Box if a Member of a Group (See Instructions)			
	(a) $\boxtimes$ (1) (b) $\square$				
3.	SEC Use O	nly			
4.	Citizenship	or Place o	f Organization		
	United State	es			
		5.	Sole Voting Power		
			0		
Number of Shares	of	6.	Shared Voting Power		
Beneficia Owned by			4,400,000 (2)		
Each Reporting		7.	Sole Dispositive Power		
Person W	ith		0		
		8.	Shared Dispositive Power		
			4,400,000 (2)		
9.	Aggregate A	Amount B	eneficially Owned by Each Reporting Person		
	4,400,000 (2)				
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)				
11.	Percent of C	Class Repr	esented by Amount in Row (9)		
8.9% (3)					
12.	Type of Rep	Type of Reporting Person (See Instructions)			
	IN	IN .			

- (1) Venrock Healthcare Capital Partners III, L.P., VHCP Co-Investment Holdings III, LLC, Venrock Healthcare Capital Partners EG, L.P., VHCP Management III, LLC, VHCP Management EG, LLC, Nimish Shah and Bong Koh are members of a group for the purposes of this Schedule 13G/A.
- (2) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P.; (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC; and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P.
- (3) This percentage is calculated based on 49,338,467 shares of common stock outstanding as of February 9, 2024 as disclosed in the Issuer's prospectus supplement dated February 6, 2024 filed with the Securities and Exchange Commission on February 8, 2024.

**Introductory Note:** This Schedule 13G/A is filed on behalf of Venrock Healthcare Capital Partners III, L.P., a limited partnership organized under the laws of the State of Delaware ("VHCP III LP"), VHCP Co-Investment Holdings III, LLC, a limited liability company organized under the laws of the State of Delaware ("VHCP Co-Investment III"), Venrock Healthcare Capital Partners EG, L.P., a limited partnership organized under the laws of the State of Delaware ("VHCP Co-Investment III"), Venrock Healthcare Capital Partners EG, L.P., a limited partnership organized under the laws of the State of Delaware ("VHCP EG"), VHCP Management III, LLC, a limited liability company organized under the laws of the State of Delaware ("VHCP Management III"), VHCP Management EG, LLC, a limited liability company organized under the laws of the State of Delaware ("VHCP Management EG" and collectively with VHCP III LP, VHCP Co-Investment III, VHCP EG and VHCP Management III, the "Venrock Entities"), Nimish Shah ("Shah") and Bong Koh ("Koh") in respect of the Common Stock of 4D Molecular Therapeutics, Inc.

#### Item 1.

(a) Name of Issuer

4D Molecular Therapeutics, Inc.

(b) Address of Issuer's Principal Executive Offices

5858 Horton Street #455 Emeryville, CA 94608

#### Item 2.

(a) Name of Person Filing

Venrock Healthcare Capital Partners III, L.P. VHCP Co-Investment Holdings III, LLC Venrock Healthcare Capital Partners EG, L.P. VHCP Management III, LLC VHCP Management EG, LLC Nimish Shah Bong Koh

(b) Address of Principal Business Office or, if none, Residence

New York Office:

7 Brvant Park

3340 Hillview Avenue Palo Alto, CA 94304

23rd Floor New York, NY 10018

(c) Citizenship

All of the Venrock Entities were organized in Delaware. The individuals are both United States citizens.

Palo Alto Office:

(d) Title of Class of Securities

Common Stock, par value \$0.0001 per share

(e) CUSIP Number

35104E100

Item 3.

Not applicable

# Item 4. Ownership

(a) Amount beneficially owned as of February 9, 2024:

Venrock Healthcare Capital Partners III, L.P.	4,400,000(1)
VHCP Co-Investment Holdings III, LLC	4,400,000(1)
Venrock Healthcare Capital Partners EG, L.P.	4,400,000(1)
VHCP Management III, LLC	4,400,000(1)
VHCP Management EG, LLC	4,400,000(1)
Nimish Shah	4,400,000(1)
Bong Koh	4,400,000(1)

(b) Percent of class as of February 9, 2024:

Venrock Healthcare Capital Partners III, L.P.	8.9%(2)
VHCP Co-Investment Holdings III, LLC	8.9%(2)
Venrock Healthcare Capital Partners EG, L.P.	8.9%(2)
VHCP Management III, LLC	8.9%(2)
VHCP Management EG, LLC	8.9%(2)
Nimish Shah	8.9%(2)
Bong Koh	8.9%(2)

# (c) Number of shares as to which the person has, as of February 9, 2024:

(i) Sole power to vote or to direct the vote:

Venrock Healthcare Capital Partners III, L.P.	0
VHCP Co-Investment Holdings III, LLC	0
Venrock Healthcare Capital Partners EG, L.P.	0
VHCP Management III, LLC	0
VHCP Management EG, LLC	0
Nimish Shah	0
Bong Koh	0

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

Venrock Healthcare Capital Partners III, L.P.	4,400,000(1)
VHCP Co-Investment Holdings III, LLC	4,400,000(1)
Venrock Healthcare Capital Partners EG, L.P.	4,400,000(1)
VHCP Management III, LLC	4,400,000(1)
VHCP Management EG, LLC	4,400,000(1)
Nimish Shah	4,400,000(1)
Bong Koh	4,400,000(1)

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

0
0
0
0
0
0
0

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

Venrock Healthcare Capital Partners III, L.P.	4,400,000(1)
VHCP Co-Investment Holdings III, LLC	4,400,000(1)
Venrock Healthcare Capital Partners EG, L.P.	4,400,000(1)
VHCP Management III, LLC	4,400,000(1)
VHCP Management EG, LLC	4,400,000(1)
Nimish Shah	4,400,000(1)
Bong Koh	4,400,000(1)

- (1) Consists of (i) 1,103,763 shares held by Venrock Healthcare Capital Partners III, L.P., (ii) 110,418 shares held by VHCP Co-Investment Holdings III, LLC and (iii) 3,185,819 shares held by Venrock Healthcare Capital Partners EG, L.P. VHCP Management III, LLC is the general partner of Venrock Healthcare Capital Partners III, L.P. and the manager of VHCP Co-Investment Holdings III, LLC. VHCP Management EG, LLC is the general partner of Venrock Healthcare Capital Partners EG, L.P. Messrs. Shah and Koh are the voting members of VHCP Management III, LLC and VHCP Management EG, LLC.
- (2) This percentage is calculated based on 49,338,467 shares of common stock outstanding as of February 9, 2024 as disclosed in the Issuer's prospectus supplement dated February 6, 2024 filed with the Securities and Exchange Commission on February 8, 2024.

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

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following  $\Box$ 

#### Item 6. Ownership of More than Five Percent on Behalf of Another Person

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

# Item 9. Notice of Dissolution of Group

Not applicable

#### Item 10. Certification

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 such purpose or effect.

#### 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: February 14, 2024

# Venrock Healthcare Capital Partners III, L.P.

- By: VHCP Management III, LLC
- Its: General Partner
- By: /s/ Sherman G. Souther Name: Sherman G. Souther Its: Authorized Signatory

#### VHCP Co-Investment Holdings III, LLC

- By: VHCP Management III, LLC
- Its: Manager
- By: /s/ Sherman G. Souther Name: Sherman G. Souther Its: Authorized Signatory

#### **VHCP Management III, LLC**

By: /s/ Sherman G. Souther Name: Sherman G. Souther Its: Authorized Signatory

#### Nimish Shah

/s/ Sherman G. Souther Sherman G. Souther, Attorney-in-fact

#### Bong Koh

/s/ Sherman G. Souther Sherman G. Souther, Attorney-in-fact

#### Venrock Healthcare Capital Partners EG, L.P.

- By: VHCP Management EG, LLC
- Its: General Partner
- By: /s/ Sherman G. Souther Name: Sherman G. Souther Its: Authorized Signatory

## VHCP Management EG, LLC

By: /s/ Sherman G. Souther

Name: Sherman G. Souther Its: Authorized Signatory

# EXHIBITS

- A: Joint Filing Agreement (incorporated by reference to Exhibit A to Schedule 13G filed on May 15, 2023)
- B: Power of Attorney for Nimish Shah (incorporated by reference to Exhibit B to Schedule 13G filed on May 15, 2023).
- <u>C:</u> Power of Attorney for Bong Koh (incorporated by reference to Exhibit C to Schedule 13G filed on May 15, 2023).