SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

(Amendment No. 8)*

4D Molecular Therapeutics, Inc.

(Name of Issuer)

Common Stock, par value $0.0001 per share

(Title of Class of Securities)

(CUSIP Number)

09/30/2026

(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)

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons BIOTECHNOLOGY VALUE FUND L P
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)
3	Sec Use Only
4	Citizenship or Place of Organization DELAWARE

Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 4,265,045.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 4,265,045.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 4,265,045.00
10		Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐
11		Percent of class represented by amount in row (9) 7.3 %
12		Type of Reporting Person (See Instructions) PN

SCHEDULE 13G

CUSIP No.

1		Names of Reporting Persons BVF I GP LLC
2		Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)
3		Sec Use Only
4		Citizenship or Place of Organization DELAWARE
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 4,265,045.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 4,265,045.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 4,265,045.00
10		Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐

11	Percent of class represented by amount in row (9) 7.3 %
12	Type of Reporting Person (See Instructions) OO

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons BIOTECHNOLOGY VALUE FUND II LP	
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization DELAWARE	
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 1,153,481.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 1,153,481.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person 1,153,481.00	
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐	
11	Percent of class represented by amount in row (9) 2.1 %	
12	Type of Reporting Person (See Instructions) PN	

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons BVF II GP LLC
2	Check the appropriate box if a member of a Group (see instructions)

	☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization DELAWARE	
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 1,153,481.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 1,153,481.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person 1,153,481.00	
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐	
11	Percent of class represented by amount in row (9) 2.1 %	
12	Type of Reporting Person (See Instructions) OO	

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons Biotechnology Value Trading Fund OS LP	
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization CAYMAN ISLANDS	
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 336,458.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power

		336,458.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person	336,458.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)	☐
11	Percent of class represented by amount in row (9)	0.6 %
12	Type of Reporting Person (See Instructions)	PN

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons	BVF Partners OS Ltd.
2	Check the appropriate box if a member of a Group (see instructions)	☑ (a) ☐ (b)
3	Sec Use Only	
4	Citizenship or Place of Organization	CAYMAN ISLANDS
Number of Shares Beneficially Owned by Each Reporting Person With:	5 Sole Voting Power	0.00
	6 Shared Voting Power	336,458.00
	7 Sole Dispositive Power	0.00
	8 Shared Dispositive Power	336,458.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person	336,458.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)	☐
11	Percent of class represented by amount in row (9)	0.6 %
12	Type of Reporting Person (See Instructions)	CO

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons BVF GP HOLDINGS LLC	
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization DELAWARE	
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 5,418,526.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 5,418,526.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person 5,418,526.00	
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐	
11	Percent of class represented by amount in row (9) 9.3 %	
12	Type of Reporting Person (See Instructions) OO	

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons BVF PARTNERS L P/IL	
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization DELAWARE	
Number of Shares Beneficially Owned by Each	5	Sole Voting Power 0.00
	6	Shared Voting Power

Reporting Person With:		5,811,860.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 5,811,860.00
	9	Aggregate Amount Beneficially Owned by Each Reporting Person 5,811,860.00
	10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐
	11	Percent of class represented by amount in row (9) 9.99 %
	12	Type of Reporting Person (See Instructions) IA, PN

SCHEDULE 13G

CUSIP No.

		Names of Reporting Persons
	1	BVF INC/IL
		Check the appropriate box if a member of a Group (see instructions)
	2	☑ (a) ☐ (b)
	3	Sec Use Only
		Citizenship or Place of Organization
	4	DELAWARE
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 5,811,860.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 5,811,860.00
	9	Aggregate Amount Beneficially Owned by Each Reporting Person 5,811,860.00
	10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐
	11	Percent of class represented by amount in row (9) 9.99 %
	12	Type of Reporting Person (See Instructions)

CO

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons LAMPERT MARK N	
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization UNITED STATES	
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 5,811,860.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 5,811,860.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person 5,811,860.00	
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐	
11	Percent of class represented by amount in row (9) 9.99 %	
12	Type of Reporting Person (See Instructions) IN	

SCHEDULE 13G

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:

Biotechnology Value Fund, L.P. ("BVF") BVF I GP LLC ("BVF GP") Biotechnology Value Fund II, L.P. ("BVF2") BVF II GP LLC ("BVF2 GP") Biotechnology Value Trading Fund OS LP ("Trading Fund OS") BVF Partners OS Ltd. ("Partners OS") BVF GP Holdings LLC ("BVF GPH") BVF Partners L.P. ("Partners") BVF Inc. Mark N. Lampert ("Mr. Lampert") Each of the foregoing is referred to as a "Reporting Person" and collectively as the "Reporting Persons."

(b) Address or principal business office or, if none, residence:

Biotechnology Value Fund, L.P. 44 Montgomery St., 40th Floor San Francisco, California 94104 BVF I GP LLC 44 Montgomery St., 40th Floor San Francisco, California 94104 Biotechnology Value Fund II, L.P. 44 Montgomery St., 40th Floor San Francisco, California 94104 BVF II GP LLC 44 Montgomery St., 40th Floor San Francisco, California 94104 Biotechnology Value Trading Fund OS LP PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands BVF Partners OS Ltd. PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands BVF GP Holdings LLC 44 Montgomery St., 40th Floor San Francisco, California 94104 BVF Partners L.P. 44 Montgomery St., 40th Floor San Francisco, California 94104 BVF Inc. 44 Montgomery St., 40th Floor San Francisco, California 94104 Mark N. Lampert 44 Montgomery St., 40th Floor San Francisco, California 94104

(c) Citizenship:

Biotechnology Value Fund, L.P. Delaware BVF I GP LLC Delaware Biotechnology Value Fund II, L.P. Delaware BVF II GP LLC Delaware Biotechnology Value Trading Fund OS LP Cayman Islands BVF Partners OS Ltd. Cayman Islands BVF GP Holdings LLC Delaware BVF Partners L.P. Delaware BVF Inc. Delaware Mark N. Lampert United States

(d) Title of class of securities:

Common Stock, par value $0.0001 per share

(e) CUSIP No.:

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:

(a) ☐ Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);

(b) ☐ Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);

(c) ☐ Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);

(d) ☐ Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);

(e) ☐ An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);

(f) ☐ An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);

(g) ☐ A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);

(h) ☐ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);

(i) ☐ A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);

(j) ☐ A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J),
please specify the type of institution:

(k) ☐ Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).

Item 4. Ownership

(a) Amount beneficially owned:

As of the close of business on September 30, 2026, the Reporting Persons and a certain Partners managed account (the "Partners Managed Account") held Pre-Funded Warrants (the "Pre-Funded Warrants") exercisable for an aggregate of 7,544,945 shares of Common Stock, par value $0.0001 per share (the "Shares"). The Pre-Funded Warrants are exercisable at any time at an exercise price of $0.0001 per Share. A holder of Pre-Funded Warrants may not exercise any such Pre-Funded Warrants if upon giving effect to such exercise, it would cause the aggregate number of Shares beneficially owned by the holder (together with affiliates and any other persons whose beneficial ownership of Shares would be aggregated for the purposes of Section 13(d) of the Exchange Act) to exceed 9.99% of the total number of then issued and outstanding Shares as determined in accordance with the terms of the Pre-Funded Warrants (the "Pre-Funded Warrants Blocker"). As of the close of business on September 30, 2026, the Pre-Funded Warrants Blocker limits the aggregate exercise of the Pre-Funded Warrants held by the Reporting Persons and the Partners Managed Account to 2,932,571 out of the 7,544,945 Shares underlying the Pre-Funded Warrants held by them. As of the close of business on September 30, 2026, (i) BVF beneficially owned 4,265,045 Shares, including 2,932,571 Shares underlying certain Pre-Funded Warrants held by it and excluding 1,203,002 Shares underlying certain Pre-Funded Warrants held by it, (ii) BVF2 beneficially owned 1,153,481 Shares, excluding 2,944,737 Shares underlying the Pre-Funded Warrants held by it, and (iii) Trading Fund OS beneficially owned 336,458 Shares, excluding 351,620 Shares underlying the Pre-Funded Warrants held by it. BVF GP, as the general partner of BVF, may be deemed to beneficially own the 4,265,045 Shares beneficially owned by BVF. BVF2 GP, as the general partner of BVF2, may be deemed to beneficially own the 1,153,481 Shares beneficially owned by BVF2. Partners

OS, as the general partner of Trading Fund OS, may be deemed to beneficially own the 336,458 Shares beneficially owned by Trading Fund OS. BVF GPH, as the sole member of each of BVF GP and BVF2 GP, may be deemed to beneficially own the 5,418,526 Shares beneficially owned in the aggregate by BVF and BVF2. Partners, as the investment manager of BVF, BVF2 and Trading Fund OS, and the sole member of Partners OS, may be deemed to beneficially own the 5,811,860 Shares beneficially owned in the aggregate by BVF, BVF2 and Trading Fund OS and held in the Partners Managed Account, including 56,876 Shares held in the Partners Managed Account, which excludes 113,015 Shares underlying the Pre-Funded Warrants held in the Partners Managed Account. BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 5,811,860 Shares beneficially owned by Partners. Mr. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the 5,811,860 Shares beneficially owned by BVF Inc. The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of any Shares owned by another Reporting Person. BVF GP disclaims beneficial ownership of the Shares beneficially owned by BVF. BVF2 GP disclaims beneficial ownership of the Shares beneficially owned by BVF2. Partners OS disclaims beneficial ownership of the Shares beneficially owned by Trading Fund OS. BVF GPH disclaims beneficial ownership of the Shares beneficially owned by BVF and BVF2. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the Shares beneficially owned by BVF, BVF2 and Trading Fund OS and held in the Partners Managed Account, and the filing of this statement shall not be construed as an admission that any such person or entity is the beneficial owner of any such securities.

Percent of class:

(b) The following percentages are based on a denominator that is the sum of: (i) 55,244,211 Shares outstanding as of August 10, 2026, as disclosed in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 13, 2026, and (ii) 2,932,571 Shares underlying certain Pre-Funded Warrants held by the Reporting Persons, as applicable. As of the close of business on September 30, 2026, (i) BVF beneficially owned approximately 7.3% of the outstanding Shares, (ii) BVF2 beneficially owned approximately 2.1% of the outstanding Shares, (iii) Trading Fund OS beneficially owned less than 1% of the outstanding Shares, (iv) BVF GP may be deemed to beneficially own approximately 7.3% of the outstanding Shares, (v) BVF2 GP may be deemed to beneficially own approximately 2.1% of the outstanding Shares, (vi) Partners OS may be deemed to beneficially own less than 1% of the outstanding Shares, (vii) BVF GPH may be deemed to beneficially own approximately 9.3% of the outstanding Shares and (viii) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 9.99% of the outstanding Shares (less than 1% of the outstanding Shares are held in the Partners Managed Account). %

(c) Number of shares as to which the person has:

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

See Cover Pages Items 5-9.

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

See Cover Pages Items 5-9.

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

See Cover Pages Items 5-9.

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

See Cover Pages Items 5-9.

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

Item 6. Ownership of more than 5 Percent on Behalf of Another Person.

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than 5 percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

BVF GP, BVF GPH, Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the Shares beneficially owned by BVF. BVF GPH, Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the Shares beneficially owned by BVF2. Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the Shares beneficially owned by Trading Fund OS and held in the Partners Managed Account.

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.

If a group has filed this schedule pursuant to §240.13d-1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to §240.13d-1(c) or §240.13d-1(d), attach an exhibit stating the identity of each member of the group.

See Exhibit 99.1 to the Schedule 13G filed with the Securities and Exchange Commission on July 6, 2021.

Item 9. Notice of Dissolution of 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 § 240.14a-11.

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.

BIOTECHNOLOGY VALUE FUND L P

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

BVF I GP LLC

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

BIOTECHNOLOGY VALUE FUND II LP

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

BVF II GP LLC

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

Biotechnology Value Trading Fund OS LP

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

BVF Partners OS Ltd.

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

BVF GP HOLDINGS LLC

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

BVF PARTNERS L P/IL

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

BVF INC/IL

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert, Authorized Signatory
Date: 11/16/2026

LAMPERT MARK N

Signature: /s/ Mark N. Lampert
Name/Title: Mark N. Lampert
Date: 11/16/2026