

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

[Rule 13d-101]

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO § 24.13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO § 240.13D-2(a)

(Amendment No. 7)*

Larimar Therapeutics, Inc.

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

517125100

(CUSIP Number)

**David Clark
Elliot Press
Deerfield Management Company, L.P.
345 Park Avenue South, 12 Floor
New York, New York 10010
(212) 551-1600**

With a copy to:

**Jonathan D. Weiner, Esq.
Mark D. Wood, Esq.
Katten Muchin Rosenman LLP
575 Madison Avenue
New York, New York 10022
(212) 940-8800**

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

February 13, 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.

(Continued on following pages)
(Page 1 of 17 Pages)

* 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	NAMES OF REPORTING PERSONS Deerfield Private Design Fund III, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,721,183
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,721,183
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,721,183	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.75%	
14	TYPE OF REPORTING PERSON PN	

1	NAMES OF REPORTING PERSONS Deerfield Healthcare Innovations Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,721,197
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,721,197
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,721,197	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.75%	
14	TYPE OF REPORTING PERSON PN	

1	NAMES OF REPORTING PERSONS Deerfield Private Design Fund IV, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,721,200
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,721,200
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,721,200	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.75%	
14	TYPE OF REPORTING PERSON PN	

1	NAMES OF REPORTING PERSONS Deerfield Partners, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 2,777,777
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 2,777,777
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,777,777	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.33%	
14	TYPE OF REPORTING PERSON PN	

1	NAMES OF REPORTING PERSONS Deerfield Mgmt III, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,721,183 (1)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,721,183 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,721,183 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.75%	
14	TYPE OF REPORTING PERSON PN	

(1) Comprised of shares of common stock held by Deerfield Private Design Fund III, L.P., of which Deerfield Mgmt III, L.P. is the general partner.

1	NAMES OF REPORTING PERSONS Deerfield Mgmt HIF, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,721,197 (2)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,721,197 (2)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,721,197 (2)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.75%	
14	TYPE OF REPORTING PERSON PN	

(2) Comprised of shares of common stock held by Deerfield Healthcare Innovations Fund, L.P., of which Deerfield Mgmt HIF, L.P. is the general partner.

1	NAMES OF REPORTING PERSONS Deerfield Mgmt, IV, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	(a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)	<input checked="" type="checkbox"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,721,200 (3)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,721,200 (3)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,721,200 (3)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*	<input type="checkbox"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.75%	
14	TYPE OF REPORTING PERSON PN	

(3) Comprised of shares of common stock held by Deerfield Private Design Fund IV, L.P., of which Deerfield Mgmt IV, L.P. is the general partner.

1	NAMES OF REPORTING PERSONS Deerfield Mgmt, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input checked="" type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 2,777,777 (4)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 2,777,777 (4)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,777,777 (4)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.33%	
14	TYPE OF REPORTING PERSON PN	

(4) Comprised of shares of common stock held by Deerfield Partners, L.P., of which Deerfield Mgmt, L.P. is the general partner.

1	NAMES OF REPORTING PERSONS Deerfield Management Company, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input checked="" type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 16,973,635 (5)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 16,973,635 (5)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 16,973,635 (5)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 39.20%	
14	TYPE OF REPORTING PERSON PN	

(5) Comprised of (i) an aggregate of 16,941,357 shares of common stock held by Deerfield Private Design Fund III, L.P., Deerfield Private Design Fund IV, L.P., Deerfield Healthcare Innovations Fund, L.P. and Deerfield Partners, L.P., of which Deerfield Management Company, L.P. is the investment manager and (ii) an aggregate of 33,200 shares of common stock issuable upon exercise of options (the “Leff Options”) held by Jonathan Leff, an employee of Deerfield Management Company, L.P., for the benefit, and subject to the direction, of Deerfield Management Company, L.P. The Leff Options consist of an option that was granted to Mr. Leff on July 16, 2020, an option that was granted to Mr. Leff on May 12, 2021, and an option that was granted to Mr. Leff on May 10, 2022, each of which is fully vested. The number of shares reported as being beneficially owned by Deerfield Management Company, L.P. does not include the shares of common stock issuable upon exercise of an option granted to Mr. Leff on May 9, 2023, which is unvested and will not vest within 60 days.

1	NAMES OF REPORTING PERSONS James E. Flynn	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 16,973,635 (6)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 16,973,635 (6)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 16,973,635 (6)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 39.20%	
14	TYPE OF REPORTING PERSON IN	

(6) Comprised of (i) an aggregate of 16,973,635 shares of common stock held by Deerfield Private Design Fund III, L.P., Deerfield Private Design Fund IV, L.P., Deerfield Healthcare Innovations Fund, L.P. and Deerfield Partners, L.P., of which Deerfield Management Company, L.P. is the investment manager and (ii) an aggregate of 33,200 shares of common stock issuable upon exercise of options (the "Leff Options") held by Jonathan Leff, an employee of Deerfield Management Company, L.P., for the benefit, and subject to the direction, of Deerfield Management Company, L.P. The Leff Options consist of an option that was granted to Mr. Leff on July 16, 2020, an option that was granted to Mr. Leff on May 12, 2021, and an option that was granted to Mr. Leff on May 10, 2022, each of which is fully vested. The number of shares reported as being beneficially owned by Mr. Flynn does not include the shares of common stock issuable upon exercise of an option granted to Mr. Leff on May 9, 2023, which is unvested and will not vest within 60 days. Mr. Flynn is the sole member of the general partner of each of Deerfield Mgmt III, L.P., Deerfield Mgmt IV, L.P., Deerfield Mgmt HIF, L.P., Deerfield Mgmt, L.P. and Deerfield Management Company, L.P.

This Amendment No. 7 (this “Amendment”) to Schedule 13D is filed by (i) Deerfield Private Design Fund III, L.P. (“Deerfield Private Design Fund III”), (ii) Deerfield Healthcare Innovations Fund, L.P. (“Deerfield Healthcare Innovations Fund”), (iii) Deerfield Private Design Fund IV, L.P. (“Deerfield Private Design Fund IV”), (iv) Deerfield Partners, L.P. (“Deerfield Partners”), (v) Deerfield Mgmt III, L.P. (“Deerfield Mgmt III”), (vi) Deerfield Mgmt HIF, L.P. (“Deerfield Mgmt HIF”), (vii) Deerfield Mgmt IV, L.P. (“Deerfield Mgmt IV”), (viii) Deerfield Mgmt, L.P. (“Deerfield Mgmt”), (ix) Deerfield Management Company, L.P. (“Deerfield Management”) and (x) James E. Flynn (“Flynn” and, together with Deerfield Private Design Fund III, Deerfield Healthcare Innovations Fund, Deerfield Private Design Fund IV, Deerfield Partners, Deerfield Mgmt III, Deerfield Mgmt HIF, Deerfield Mgmt IV, Deerfield Mgmt and Deerfield Management, the “Reporting Persons”), with respect to the securities of Larimar Therapeutics, Inc. (as amended by Amendment No.1, Amendment No. 2, Amendment No. 3, Amendment No. 4, Amendment No. 5, Amendment No. 6 and this Amendment No. 7, the “Schedule 13D”). Deerfield Private Design Fund III, Deerfield Healthcare Innovations Fund, Deerfield Private Design Fund IV and Deerfield Partners are collectively referred to herein as the “Funds”.

Capitalized terms used herein but not otherwise defined herein shall have the meanings ascribed to them in the Schedule 13D.

This Amendment No. 7 is being filed to report the Funds’ entry into the 2024 Lockup Agreement (as defined below) in connection with the February 2024 Offering (as defined below). The issuance of shares in the February 2024 Offering is subject to the terms and conditions set forth in the underwriting agreement entered into among the Issuer and the underwriters in the February 2024 Offering and, accordingly, the number of shares reported herein does not give effect to any such issuance.

Item 5. Interest in Securities of the Issuer.

Items 5(a) and 5(b) of the Schedule 13D are hereby amended and restated in their entirety to read as follows:

(a)

(1)	<u>Deerfield Private Design Fund III</u>	
	Number of shares:	4,721,183
	Percentage of shares:	10.75%*
(2)	<u>Deerfield Healthcare Innovations Fund</u>	
	Number of shares:	4,721,197
	Percentage of shares:	10.75%*
(3)	<u>Deerfield Private Design Fund IV</u>	
	Number of shares:	4,721,200
	Percentage of shares:	10.75%*
(4)	<u>Deerfield Partners</u>	
	Number of shares:	2,777,777
	Percentage of shares:	6.33%*

(5)	<u>Deerfield Mgmt III</u>	Number of shares: 4,721,183 (comprised of shares held by Deerfield Private Design Fund III) Percentage of shares: 10.75%*
(6)	<u>Deerfield Mgmt HIF</u>	Number of shares: 4,721,197 (comprised of shares held by Deerfield Healthcare Innovations Fund) Percentage of shares: 10.75%*
(7)	<u>Deerfield Mgmt IV</u>	Number of shares: 4,721,200 (comprised of shares held by Deerfield Private Design Fund) Percentage of shares: 10.75%*
(8)	<u>Deerfield Mgmt</u>	Number of shares: 2,777,777 (comprised of shares held by Deerfield Partners) Percentage of shares: 6.33%*
(9)	<u>Deerfield Management</u>	Number of shares: 16,973,635 (comprised of shares held by Deerfield Private Design Fund III, Deerfield Private Design Fund IV, Deerfield Healthcare Innovations Fund, Deerfield Partners and shares underlying options held by Jonathan Leff at the direction and for the benefit of Deerfield Management) Percentage of shares: 39.20%*
(10)	<u>James E. Flynn</u>	Number of shares: 16,973,635 (comprised of shares held by Deerfield Private Design Fund III, Deerfield Private Design Fund IV, Deerfield Healthcare Innovations Fund, Deerfield Partners and shares underlying options held by Jonathan Leff at the direction and for the benefit of Deerfield Management) Percentage of shares: 39.20%*

*Throughout this report, the percentage of outstanding Common Stock beneficially owned by the Reporting Persons reflects 43,905,903 shares of Common Stock outstanding as of November 12, 2023, as set forth in the Quarterly Report on Form 10-Q, filed by the Company with the Securities and Exchange Commission on November 14, 2023.

(b)

(1) Deerfield Private Design Fund III

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 4,721,183
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 4,721,183

(2) Deerfield Healthcare Innovations Fund

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 4,721,197
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 4,721,197

(3) Deerfield Private Design Fund IV

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 4,721,200
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 4,721,200

(4) Deerfield Partners

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 2,777,777
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 2,777,777

(5) Deerfield Mgmt III

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 4,721,183
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 4,721,183

(6) Deerfield Mgmt HIF

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 4,721,197
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 4,721,197

(7) Deerfield Mgmt IV

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 4,721,200
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 4,721,200

(8) Deerfield Mgmt

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 2,777,777
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 2,777,777

(9) Deerfield Management

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 16,973,635
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 16,973,635

(10) James E. Flynn

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 16,973,635
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 16,973,635

James E. Flynn is the managing member of the general partner of each of Deerfield Mgmt III, Deerfield Mgmt IV, Deerfield Mgmt HIF, Deerfield Mgmt, and Deerfield Management. Deerfield Mgmt III is the general partner of Deerfield Private Design Fund III. Deerfield Mgmt HIF is the general partner of Deerfield Healthcare Innovations Fund. Deerfield Mgmt IV is the general partner of Deerfield Private Design Fund IV. Deerfield Mgmt is the general partner of Deerfield Partners. Deerfield Management is the investment manager of each of Deerfield Private Design Fund III, Deerfield Healthcare Innovations Fund, Deerfield Private Design Fund IV and Deerfield Partners.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.

Item 6 of the Schedule 13D is hereby amended by adding the following:

2024 Lock-Up Agreement

On February 14, 2024, the Issuer announced the pricing of an underwritten public offering of its common stock (the “February 2024 Offering”). In connection with the February 2024 Offering, the Funds and representatives of the underwriters in the February 2024 Offering entered into a Lock-Up Agreement (the “2024 Lockup Agreement”), the form of which is attached hereto as Exhibit I, pursuant to which the Funds have agreed, except in limited circumstances, not to sell or transfer, or engage in swap or similar transactions with respect to, shares of Common Stock for a period of 90 days. The 2024 Lockup Agreement does not apply to any shares of Common Stock that the Funds purchase from the underwriters in the February 2024 Offering. The Funds have agreed to purchase an aggregate of 4,290,617 shares of the Common Stock offered by the Company in the February 2024 Offering at the public offering price.

The foregoing description of the 2024 Lockup Agreement is not, and does not purport to be, complete and is qualified in its entirety by reference to the full text thereof.

Item 7. Material to be Filed as Exhibits.

Item 7 of the Schedule 13D is hereby amended by adding the following Exhibit

I. [Form of Lock-up Agreement*](#)

*Filed herewith

SIGNATURE

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

Dated: February 15, 2024

DEERFIELD PRIVATE DESIGN FUND III, L.P.

By: Deerfield Mgmt III, L.P., General Partner

By: J.E. Flynn Capital III, LLC, General Partner

By: /s/ Jonathan Isler

Name: Jonathan Isler

Title: Attorney-in-Fact

DEERFIELD HEALTHCARE INNOVATIONS FUND, L.P.

By: Deerfield Mgmt HIF, L.P., General Partner

By: J.E. Flynn Capital HIF, LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD PRIVATE DESIGN FUND IV, L.P.

By: Deerfield Mgmt IV, L.P., General Partner

By: J.E. Flynn Capital IV, LLC, General Partner

By: /s/ Jonathan Isler

Name: Jonathan Isler

Title: Attorney-in-Fact

DEERFIELD PARTNERS, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital, LLC, General Partner

By: /s/ Jonathan Isler

Name: Jonathan Isler

Title: Attorney-in-Fact

DEERFIELD MGMT, L.P.

By: J.E. Flynn Capital, LLC, General Partner

By: /s/ Jonathan Isler

Name: Jonathan Isler

Title: Attorney-in-Fact

DEERFIELD MGMT III, L.P.

By: J.E. Flynn Capital III, LLC, General Partner

By: /s/ Jonathan Isler

Name: Jonathan Isler

Title: Attorney-in-Fact

DEERFIELD MGMT HIF, L.P.

By: J.E. Flynn Capital HIF, LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-in-Fact

DEERFIELD MGMT IV, L.P.

By: J.E. Flynn Capital IV, LLC, General Partner

By: /s/ Jonathan Isler

Name: Jonathan Isler

Title: Attorney-in-Fact

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC, General Partner

By: /s/ Jonathan Isler

Name: Jonathan Isler

Title: Attorney-in-Fact

JAMES E. FLYNN

/s/ Jonathan Isler

Jonathan Isler, Attorney-in-Fact

Form of Lock-Up Agreement

Leerink Partners LLC
Citigroup Global Markets Inc.
Guggenheim Securities, LLC

As Representatives of the several Underwriters

c/o Leerink Partners LLC
53 State Street, 40th Floor
Boston, Massachusetts 02109

c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

c/o Guggenheim Securities, LLC
330 Madison Avenue
New York, New York 10017

Re: Larimar Therapeutics, Inc. – Lock-Up Agreement

Ladies and Gentlemen:

This letter agreement (this “**Agreement**”) relates to the proposed offering (the “**Offering**”) by Larimar Therapeutics, Inc., a Delaware corporation (the “**Company**”), of its common stock, \$0.001 par value (the “**Stock**”) and/or other equity securities of the Company, pursuant to an Underwriting Agreement (the “**Underwriting Agreement**”) to be entered into by and among the Company and Leerink Partners LLC, Citigroup Global Markets Inc. and Guggenheim Securities, LLC, as representatives (the “**Representatives**”) of the several underwriters named therein (the “**Underwriters**”).

In order to induce you and the other Underwriters to underwrite the Offering, the undersigned hereby agrees that, without the prior written consent of the Representatives, during the period from the date hereof until 90 days from the date of the final prospectus supplement for the Offering (the “**Lock-Up Period**”), the undersigned will not (a) directly or indirectly, offer, sell, agree to offer or sell, solicit offers to purchase, grant any call option or purchase any put option with respect to, pledge, borrow or otherwise dispose of, any Relevant Security (as defined below), (b) establish or increase any “put equivalent position” or liquidate or decrease any “call equivalent position” with respect to any Relevant Security (in each case within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and the rules and regulations promulgated thereunder), (c) otherwise enter into any swap, hedge, derivative or other transaction or arrangement that transfers to another, in whole or in part, any economic consequence of ownership of a Relevant Security, whether or not such transaction is to be settled by delivery of Relevant Securities, other securities, cash or other consideration, or (d) publicly announce any intention to do any of the foregoing. As used herein “**Relevant Security**” means the Stock, any other equity security of the Company or any of its subsidiaries and any security convertible into, or exercisable or exchangeable for, any Stock or other such equity security.

The foregoing restrictions in this Agreement shall not apply to:

- (a) the transfer of Relevant Securities (i) as a bona fide gift or gifts, (ii) by will, other testamentary document or intestate succession, (iii) to a Family Member (as defined below), (iv) to a trust for the direct or indirect benefit of the undersigned and/or one or more Family Members, (v) by operation of law, including pursuant to a domestic order, divorce settlement, divorce decree, separation agreement or pursuant to an order of a court of competent jurisdiction enforcing such agreement, (vi) to a charitable trust or (vii) if the undersigned is a trust, to the beneficiary of such trust;

- (b) the transfer of Relevant Securities to the Company (i) as forfeitures to satisfy tax withholding obligations of the undersigned existing as of the date of the final prospectus supplement in connection with the vesting or exercise of equity awards, (ii) pursuant to a net exercise or cashless exercise (to satisfy exercise price or related withholding obligations) by the undersigned of outstanding equity awards existing as of the date of the final prospectus supplement, *provided* that any shares of Stock acquired upon the net exercise or cashless exercise of equity awards described in this clause (b) shall be subject to the restrictions set forth in this Agreement, or (iii) by an executive officer upon death, disability or termination of employment, in each case, of such executive officer;
- (c) distributions of Relevant Securities to limited partners, members or stockholders of the undersigned;
- (d) transactions relating to Relevant Securities acquired in the Offering or in open market transactions after the closing of the Offering;
- (e) the transfer of Relevant Securities pursuant to a bona fide third-party tender offer for all outstanding shares of the Company, merger, consolidation or other similar transaction made to all holders of the Company's securities involving a change of control of the Company (including, without limitation, the entering into of any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of Relevant Securities in connection with such transaction, or vote any Relevant Securities in favor of any transaction), *provided* that in the event that such tender offer, merger, consolidation or other such transaction is not completed, such securities held by the undersigned shall remain subject to the provisions of this Agreement;
- (f) the transfer of Relevant Securities to a corporation, limited liability company or partnership wholly owned by the undersigned and/or one or more Family Members or to the undersigned's direct or indirect affiliates or to any investment fund or any manager thereof or other entity controlled or managed by, controlling or managing, or under common control with, the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund or any other funds managed by such partnership); and
- (g) pledges of Relevant Securities as collateral pursuant to a bona fide margin loan (including any subsequent transfer upon foreclosure under any such pledge).

It shall be a further condition to any transfer or distribution pursuant to the preceding clauses (a), (b), (c), (d) or (f) that no public disclosure or filing by any party (donor, donee, transferor or transferee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on Form 5 made after the expiration of the Lock-up Period); *provided, however,* that in the case of any transfer or distribution pursuant to clauses (a), (b), (c), (d) or (f), to the extent the undersigned is required to file a report under Section 13 or Section 16 of the Exchange Act, the undersigned shall be permitted to proceed with such transaction irrespective of such filing requirement and file such report, *provided* the report clearly indicates in the footnotes or otherwise in the text disclosure thereto the nature of the transfer and no other public announcement shall be required or shall be made voluntarily in connection with such transfer.

It shall be a condition to any transfer or distribution pursuant to the preceding clause (a) that (x) any such transfer shall not involve a disposition for value and (y) each resulting transferee or donee of Relevant Securities executes and delivers to you an agreement satisfactory to you in which such transferee agrees to be bound by the terms of this Agreement for the remainder of the Lock-Up Period.

It shall be a condition to any transfer or distribution pursuant to each of the preceding clauses (c), (f) or (g) (solely in the case of subsequent transfer upon foreclosure under any such pledge) that each resulting transferee or donee of Relevant Securities executes and delivers to you an agreement satisfactory to you in which such transferee agrees to be bound by the terms of this Agreement for the remainder of the Lock-Up Period.

For purposes of this Agreement, the term “**Family Member**” shall mean any relationship by blood, domestic partnership, marriage or adoption not more remote than first cousin.

In addition, the restrictions described in this Agreement shall not apply to the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act, *provided* that no transfers occur under such plan during the Lock-up Period and no public announcement or filing shall be required or voluntarily made by any person in connection therewith other than general disclosure in Company periodic reports to the effect that the Company directors and officers may enter into such trading plans from time to time.

The undersigned hereby authorizes the Company during the Lock-Up Period to cause any transfer agent for the Relevant Securities to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, Relevant Securities for which the undersigned is the record holder. The undersigned hereby further agrees that, without the prior written consent of the Representatives, during the Lock-Up Period the undersigned will not (x) file or participate in the filing with the U.S. Securities and Exchange Commission (the “**SEC**”) of any registration statement, or circulate or participate in the circulation of any preliminary or final prospectus supplement or other disclosure document with respect to any proposed offering or sale of a Relevant Security, (y) exercise any rights the undersigned may have to require registration with the SEC of any proposed offering or sale of a Relevant Security, or (z) publicly announce any intention to do any of the foregoing.

It is understood that, if (i) the Company notifies the Underwriters that it does not intend to proceed with the Offering, (ii) the Underwriting Agreement does not become effective, (iii) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Stock, or (iv) the closing of the Offering pursuant to the Underwriting Agreement has not occurred by February 29, 2024, the undersigned will be immediately and automatically released from its obligations under this Agreement.

It is further understood that if any party to a lock-up agreement with respect to the Company is formally or informally released or waived from any or all of its obligations thereunder (the “**Released Party**”), the undersigned will be similarly and contemporaneously released or waived from its obligations hereunder (which for the avoidance of doubt will include a release or waiver of the same percentage of the shares of the Relevant Securities as was granted to the Released Party) and the Underwriters agree to provide notice thereof to the undersigned at least three (3) business days prior thereto. Notwithstanding the foregoing, the provisions of this paragraph shall not apply if (1) the aggregate number of shares of Stock subject to releases or waivers granted by the Representatives during the Lock-Up Period represents less than or equal to 10% of the total number subject to such lock-up agreements (determined as of the date of the closing of the Offering and giving effect to the Offering), or (2) the release or waiver is granted to a natural person due to circumstances of an emergency or hardship as determined by the Representatives in their sole judgment.

The undersigned understands that the Company and the Underwriters will proceed with the Offering in reliance on this Agreement.

Whether or not the Offering actually occurs depends on a number of factors, including market conditions. Any Offering will only be made pursuant to the Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Agreement and that this Agreement constitutes the legal, valid and binding obligation of the undersigned, enforceable in accordance with its terms. Upon request, the undersigned will execute any additional documents necessary in connection with enforcement hereof. Any obligations of the undersigned shall be binding upon the successors, heirs, personal representatives and assigns of the undersigned from the date first above written.

This Agreement shall be governed by and construed in accordance with the laws of the State of New York. This letter agreement may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com or www.echosign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

[remainder of page left intentionally blank]

Very truly yours,

Name of Security Holder *(Print exact name)*

By: _____
Signature

If not signing in an individual capacity:

Name of Authorized Signatory *(Print)*

Title of Authorized Signatory *(Print)*

(indicate capacity of person signing if signing as custodian, trustee, or on behalf of an entity)

[Signature Page to Lock-Up Agreement]