

---

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

---

**SCHEDULE 13D**

**UNDER THE SECURITIES EXCHANGE ACT OF 1934  
(Amendment No. 1)\***

---

**Aptinyx Inc.**  
(Name of Issuer)

**Common Stock**  
(Title of Class of Securities)

**03836N 103**  
(CUSIP Number)

**Steve R. Bailey**  
**Frazier Healthcare Partners**  
**601 Union Street, Suite 3200**  
**Seattle, WA 98101**  
**Telephone: (206) 621-7200**  
(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

**January 14, 2020**  
(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).

---

---

CUSIP No. 03836N 103

1.	Name of Reporting Persons. Frazier Life Sciences VIII, L.P.
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3.	SEC USE ONLY
4.	Source of Funds (See Instructions) 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 shares
	8. Shared Voting Power 3,190,079 shares (1)
	9. Sole Dispositive Power 0 shares
	10. Shared Dispositive Power 3,190,079 shares (1)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,190,079 shares (1)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 7.0% (2)
14.	Type of Reporting Person (See Instructions) PN

- (1) Consists of 3,190,079 shares of Common Stock held directly by Frazier Life Sciences VIII, L.P. FHM Life Sciences VIII, L.P. is the general partner of Frazier Life Sciences VIII, L.P. and FHM Life Sciences VIII, L.L.C. is the general partner of FHM Life Sciences VIII, L.P. James N. Topper and Patrick J. Heron are the sole members of FHM Life Sciences VIII, L.L.C. and therefore share voting and investment power over the shares held by Frazier Life Sciences VIII, L.P.
- (2) Based on 45,371,631 shares of Common Stock that were anticipated to be outstanding following the Issuer's public offering (including the 1,525,000 shares of Common Stock that the underwriters had the option to purchase in the public offering) as set forth in the Issuer's final prospectus filed with the SEC pursuant to Rule 424(b)(5) on January 13, 2020.

CUSIP No. 03836N 103

1.	Name of Reporting Persons. FHM Life Sciences VIII, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	Source of Funds (See Instructions) 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 shares
	8.	Shared Voting Power 3,190,079 shares (1)
	9.	Sole Dispositive Power 0 shares
	10.	Shared Dispositive Power 3,190,079 shares (1)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,190,079 shares (1)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 7.0% (2)	
14.	Type of Reporting Person (See Instructions) PN	

- (1) Consists of 3,190,079 shares of Common Stock held directly by Frazier Life Sciences VIII, L.P. FHM Life Sciences VIII, L.P. is the general partner of Frazier Life Sciences VIII, L.P. and FHM Life Sciences VIII, L.L.C. is the general partner of FHM Life Sciences VIII, L.P. James N. Topper and Patrick J. Heron are the sole members of FHM Life Sciences VIII, L.L.C. and therefore share voting and investment power over the shares held by Frazier Life Sciences VIII, L.P.
- (2) Based on 45,371,631 shares of Common Stock that were anticipated to be outstanding following the Issuer's public offering (including the 1,525,000 shares of Common Stock that the underwriters had the option to purchase in the public offering) as set forth in the Issuer's final prospectus filed with the SEC pursuant to Rule 424(b)(5) on January 13, 2020.

1.	Name of Reporting Persons. FHM Life Sciences VIII, L.L.C.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	Source of Funds (See Instructions) 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 shares
	8.	Shared Voting Power 3,190,079 shares (1)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 3,190,079 shares (1)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,190,079 shares (1)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 7.0% (2)	
14.	Type of Reporting Person (See Instructions) OO	

- (1) Consists of 3,190,079 shares of Common Stock held directly by Frazier Life Sciences VIII, L.P. FHM Life Sciences VIII, L.P. is the general partner of Frazier Life Sciences VIII, L.P. and FHM Life Sciences VIII, L.L.C. is the general partner of FHM Life Sciences VIII, L.P. James N. Topper and Patrick J. Heron are the sole members of FHM Life Sciences VIII, L.L.C. and therefore share voting and investment power over the shares held by Frazier Life Sciences VIII, L.P.
- (2) Based on 45,371,631 shares of Common Stock that were anticipated to be outstanding following the Issuer's public offering (including the 1,525,000 shares of Common Stock that the underwriters had the option to purchase in the public offering) as set forth in the Issuer's final prospectus filed with the SEC pursuant to Rule 424(b)(5) on January 13, 2020.

1.	Name of Reporting Persons. James N. Topper
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3.	SEC USE ONLY
4.	Source of Funds (See Instructions) 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 Citizen
Number of Shares Beneficially Owned by Each Reporting Person With:	7. Sole Voting Power 0 shares
	8. Shared Voting Power 3,240,116 shares (1)
	9. Sole Dispositive Power 0 shares
	10. Shared Dispositive Power 3,240,116 shares (1)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,240,116 shares (1)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 7.1% (2)
14.	Type of Reporting Person (See Instructions) IN

- (1) Consists of (1) 50,037 shares of Common Stock that are issuable upon the exercise of options held directly by James N. Topper that are exercisable within 60 days of January 14, 2020 and (2) 3,190,079 shares of Common Stock held directly by Frazier Life Sciences VIII, L.P. FHM Life Sciences VIII, L.P. is the general partner of Frazier Life Sciences VIII, L.P. and FHM Life Sciences VIII, L.L.C. is the general partner of FHM Life Sciences VIII, L.P. James N. Topper and Patrick J. Heron are the sole members of FHM Life Sciences VIII, L.L.C. and therefore share voting and investment power over the shares held by Frazier Life Sciences VIII, L.P.
- (2) Based on (1) 45,371,631 shares of Common Stock that were anticipated to be outstanding following the Issuer's public offering (including the 1,525,000 shares of Common Stock that the underwriters had the option to purchase in the public offering) as set forth in the Issuer's final prospectus filed with the SEC pursuant to Rule 424(b)(5) on January 13, 2020, and (2) 50,037 shares of Common Stock that are issuable upon the exercise of options held directly by Mr. Topper that are exercisable within 60 days of January 14, 2020.

CUSIP No. 03836N 103

1.	Name of Reporting Persons. Patrick J. Heron
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3.	SEC USE ONLY
4.	Source of Funds (See Instructions) 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 Citizen
Number of Shares Beneficially Owned by Each Reporting Person With:	7. Sole Voting Power 0 shares
	8. Shared Voting Power 3,190,079 shares (1)
	9. Sole Dispositive Power 0 shares
	10. Shared Dispositive Power 3,190,079 shares (1)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,190,079 shares (1)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 7.0% (2)
14.	Type of Reporting Person (See Instructions) IN

- (1) Consists of 3,190,079 shares of Common Stock held directly by Frazier Life Sciences VIII, L.P. FHM Life Sciences VIII, L.P. is the general partner of Frazier Life Sciences VIII, L.P. and FHM Life Sciences VIII, L.L.C. is the general partner of FHM Life Sciences VIII, L.P. James N. Topper and Patrick J. Heron are the sole members of FHM Life Sciences VIII, L.L.C. and therefore share voting and investment power over the shares held by Frazier Life Sciences VIII, L.P.
- (2) Based on 45,371,631 shares of Common Stock that were anticipated to be outstanding following the Issuer's public offering (including the 1,525,000 shares of Common Stock that the underwriters had the option to purchase in the public offering) as set forth in the Issuer's final prospectus filed with the SEC pursuant to Rule 424(b)(5) on January 13, 2020.

---

**Item 1. Security and Issuer.**

This Amendment No. 1 (“Amendment No. 1”) to Schedule 13D amends the statement on Schedule 13D filed on July 5, 2018 (the “Original Schedule 13D” and together with this Amendment No. 1, the “Schedule 13D”) with respect to the Common Stock of Aptinyx Inc. (the “Issuer”), having its principal executive office at 909 Davis Street, Suite 600, Evanston, IL 60201. Except as otherwise specified in this Amendment No. 1, all items in the Original Schedule 13D are unchanged. All capitalized terms used in this Amendment No. 1 and not otherwise defined herein have the meanings ascribed to such terms in the Original Schedule 13D.

The Reporting Persons are filing this Amendment No. 1 to report a decrease in the percentage of the class beneficially owned by the Reporting Persons due to an increase in the aggregate number of outstanding securities of the Issuer.

**Item 5. Interest in Securities of the Issuer**

- (a) FLS VIII is the record owner of the Frazier Shares. As the sole general partner of FLS VIII, FHM-VIII, L.P. may be deemed to own beneficially the Frazier Shares. As the sole general partner of FHM-VIII, L.P., FHM LS VIII LLC may be deemed to own beneficially the Frazier Shares. As individual members of FHM LS VIII LLC, each of the Topper and Heron may be deemed to beneficially own the Frazier Shares. Each Reporting Person disclaims beneficial ownership of all Frazier Shares other than those shares which such person owns of record.

The percentage of outstanding shares of Common Stock of the Issuer, which may be deemed to be beneficially owned by each of FLS-VIII, FHM LS VIII L.P., FHM LS VIII LLC and Heron, is set forth on Line 13 of such Reporting Person’s cover sheet. Such percentage was calculated based on the 45,371,631 shares of Common Stock that were anticipated to be outstanding following the Issuer’s public offering (including the 1,525,000 shares of Common Stock that the underwriters had the option to purchase in the public offering) as set forth in the Issuer’s final prospectus filed with the SEC pursuant to Rule 424(b)(5) on January 13, 2020.

The percentage of outstanding Common Stock of the Issuer, which may be deemed to be beneficially owned by Topper, is set forth on Line 13 of Topper’s cover sheet. Such percentage was calculated based on (i) 45,371,631 shares of Common Stock that were anticipated to be outstanding following the Issuer’s public offering (including the 1,525,000 shares of Common Stock that the underwriters had the option to purchase in the public offering) as set forth in the Issuer’s final prospectus filed with the SEC pursuant to Rule 424(b)(5) on January 13, 2020, and (ii) 50,037 shares of Common Stock that are issuable upon the exercise of options held directly by Mr. Topper that are exercisable within 60 days of January 14, 2020.

- (b) Regarding the number of shares as to which such person has:
- a. Sole power to vote or to direct the vote: See line 7 of cover sheets.
  - b. Shared power to vote or to direct the vote: See line 8 of cover sheets.
  - c. Sole power to dispose or to direct the disposition: See line 9 of cover sheets.
  - d. Shared power to dispose or to direct the disposition: See line 10 of cover sheets.

- (c) Information with respect to transactions in the Securities which were effected within the past sixty days or since the most recent filing on Schedule 13D, whichever is less, by the Reporting Persons is set forth below.

*FLS-VIII:*

<u>Date of Transaction</u>	<u>Type of Transaction</u>	<u>Quantity</u>	<u>Class of Stock</u>	<u>Price Per Share (excluding commissions)</u>
N/A	N/A	N/A	N/A	N/A

*FHMLS VIII LP:*

<u>Date of Transaction</u>	<u>Type of Transaction</u>	<u>Quantity</u>	<u>Class of Stock</u>	<u>Price Per Share (excluding commissions)</u>
N/A	N/A	N/A	N/A	N/A

*FHMLS VIII LLC:*

<u>Date of Transaction</u>	<u>Type of Transaction</u>	<u>Quantity</u>	<u>Class of Stock</u>	<u>Price Per Share (excluding commissions)</u>
N/A	N/A	N/A	N/A	N/A

*Heron:*

<u>Date of Transaction</u>	<u>Type of Transaction</u>	<u>Quantity</u>	<u>Class of Stock</u>	<u>Price Per Share (excluding commissions)</u>
N/A	N/A	N/A	N/A	N/A

*Topper:*

<u>Date of Transaction</u>	<u>Type of Transaction</u>	<u>Quantity</u>	<u>Class of Stock</u>	<u>Price Per Share (excluding commissions)</u>
12/31/2019	Stock Option Award	5,018	Common Stock	\$3.42

- (d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, the Frazier Shares beneficially owned by any of the Reporting Persons.
- (e) Not applicable.



---

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

*Equity Award Arrangements*

Topper has been granted equity securities pursuant to the Issuer's 2018 Stock Option and Incentive Plan. The forms of award agreements applicable to such awards were previously filed with the SEC and the terms of such equity securities, including number of securities, date of grants, vesting schedules, type of awards, exercise prices and expiration dates have been previously been disclosed in the Topper's Form 4 filings made with the SEC between April 2, 2019 and January 3, 2020.

Other than as described in this Schedule 13D, to the best of the Reporting Persons' knowledge, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer.

**Item 7. Material to Be Filed as Exhibits**

Exhibit B - Form of Stock Option Agreement and 2018 Stock Option and Incentive Plan (incorporated by reference to Exhibit 10.2 to the Issuer's Registration Statement on Form S-1/A, as filed with the SEC on June 11, 2018).

---

**SIGNATURES**

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: January 16, 2020

**FRAZIER LIFE SCIENCES VIII, L.P.**

By FHM Life Sciences VIII, L.P., its general partner

By FHM Life Sciences VIII, L.L.C., its general partner

By: /s/ Steve R. Bailey

Steve R. Bailey, Chief Financial Officer

Date: January 16, 2020

**FHM LIFE SCIENCES VIII, L.P.**

By FHM Life Sciences VIII, L.L.C., its general partner

By: /s/ Steve R. Bailey

Steve R. Bailey, Chief Financial Officer

Date: January 16, 2020

**FHM LIFE SCIENCES VIII, L.L.C.**

By: /s/ Steve R. Bailey

Steve R. Bailey, Chief Financial Officer

Date: January 16, 2020

By: \*

James Topper

Date: January 16, 2020

By: \*

Patrick J. Heron

Date: January 16, 2020

\*By: /s/ Steve R. Bailey

Steve R. Bailey, as Attorney-in-Fact

This Schedule 13D was executed by Steve R. Bailey on behalf of the individuals listed above pursuant to a Power of Attorney, a copy of which was filed with the SEC on July 31, 2017.