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

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934 (Amendment No. 2)*

MAGENTA THERAPEUTICS, INC.

(Name of Issuer)

Common Stock, \$0.001 par value per share (Title of Class of Securities)

55910K108 (CUSIP Number)

Atlas Venture
Attention: Ommer Chohan, Chief Financial Officer
300 Technology Square, 8th Floor
Cambridge, MA 02139 USA
(857) 201-2700
(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

April 13, 2021
(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).

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1	NAMES OF REPORTING PERSONS: ATLAS VENTURE FUND X, L.P.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) \square (b) \boxtimes		
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): $\hfill\Box$		
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware		
NUMBER	7 SOLE VOTING POWER: 0		
OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	8 SHARED VOTING POWER: 2,664,036 ¹		
	9 SOLE DISPOSITIVE POWER: 0		
	10 SHARED DISPOSITIVE POWER: 2,664,036 ¹		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,664,036 ¹		
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): $\hfill\Box$		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 4.5% ²		
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): PN		

As described in Item 5 below, Atlas Venture Fund X, L.P., a Delaware limited partnership ("Atlas X") beneficially own 2,664,036 shares of the Issuer's Common Stock that are directly held by Atlas X. Atlas Venture Associates X, L.P., a Delaware limited partnership ("AVA X LP") is the general partner of Atlas X and Atlas Venture Associates X, LLC, a Delaware limited liability company ("AVA X LLC" and together with Atlas X and AVA X LP, the "Fund X Reporting Persons") is the general partner of AVA X LP. Each of AVA X LP and AVA X LLC has voting and dispositive power over the shares held by Atlas X. As such, each of the Fund X Reporting Persons share voting and dispositive power with respect to the shares held by Atlas X.

This percentage is calculated based upon 58,799,157 outstanding shares of Common Stock of the Issuer, as reported in the Issuer's 10-K for the fiscal year ended December 31, 2021, filed with the Securities and Exchange Commission on March 8, 2022.

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1	NAMES OF REPORTING PERSONS: ATLAS VENTURE ASSOCIATES X, L.P.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) \square (b) \boxtimes		
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): $\hfill\Box$		
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware		
NUMBER	7 SOLE VOTING POWER: 0		
OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	8 SHARED VOTING POWER: 2,977,448 ¹		
	9 SOLE DISPOSITIVE POWER: 0		
	10 SHARED DISPOSITIVE POWER: 2,977,448 ¹		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,977,448 ¹		
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): \Box		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 5.1% ²		
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): PN		

- As described in Item 5 below, AVA X LP and AVA X LLC beneficially own 2,977,448 shares of the Issuer's Common Stock (2,664,036 shares of the Issuer's Common Stock that are directly held by Atlas X and 313,412 shares of the Issuer's Common Stock that are directly held by AVA X LP). AVA X LP is the general partner of Atlas X and AVA X LLC is the general partner of AVA X LP. Each of AVA X LP and AVA X LLC has voting and dispositive power over the shares held by Atlas X and AVA X LLC has voting and dispositive power over the shares held by AVA X LP. As such, each of the Fund X Reporting Persons share voting and dispositive power with respect to the shares held by Atlas X.
- This percentage is calculated based upon 58,799,157 outstanding shares of Common Stock of the Issuer, as reported in the Issuer's 10-K for the fiscal year ended December 31, 2021, filed with the Securities and Exchange Commission on March 8, 2022.

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1	NAMES OF REPORTING PERSONS: ATLAS VENTURE ASSOCIATES X, LLC		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) \square (b) \boxtimes		
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): $\hfill\Box$		
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware		
NUMBER	7 SOLE VOTING POWER: 0		
OF SHARES BENEFICIALLY	8 SHARED VOTING POWER: 2,977,448 ¹		
OWNED BY EACH REPORTING PERSON WITH	9 SOLE DISPOSITIVE POWER: 0		
	10 SHARED DISPOSITIVE POWER: 2,977,448 ¹		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,977,448 ¹		
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): $\hfill\Box$		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 5.1% ²		
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): OO		

- As described in Item 5 below, AVA X LP and AVA X LLC beneficially own 2,977,448 shares of the Issuer's Common Stock (2,664,036 shares of the Issuer's Common Stock that are directly held by Atlas X and 313,412 shares of the Issuer's Common Stock that are directly held by AVA X LP). AVA X LP is the general partner of Atlas X and AVA X LLC is the general partner of AVA X LP. Each of AVA X LP and AVA X LLC has voting and dispositive power over the shares held by Atlas X and AVA X LLC has voting and dispositive power over the shares held by AVA X LP. As such, each of the Fund X Reporting Persons share voting and dispositive power with respect to the shares held by Atlas X.
- This percentage is calculated based upon 58,799,157 outstanding shares of Common Stock of the Issuer, as reported in the Issuer's 10-K for the fiscal year ended December 31, 2021, filed with the Securities and Exchange Commission on March 8, 2022.

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1	NAMES OF REPORTING PERSONS: ATLAS VENTURE OPPORTUNITY FUND I, L.P.			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) \square (b) \boxtimes			
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): $\hfill\Box$			
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: 812,500 ¹		
	9	SOLE DISPOSITIVE POWER: 0		
	10	SHARED DISPOSITIVE POWER: 812,500 ¹		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 812,500 ¹			
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): $\hfill\Box$			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 1.4% ²			
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): PN			

- As described in Item 5 below, Atlas Venture Opportunity Fund I, L.P., a Delaware limited partnership ("AVOF") beneficially owns 812,500 shares of the Issuer's Common Stock that are directly held by AVOF. Atlas Venture Associates Opportunity I, L.P., a Delaware limited partnership ("AVAO LP") is the general partner of AVOF and Atlas Venture Associates Opportunity I, LLC, a Delaware limited liability company ("AVAO LLC" and together with AVOF and AVAO LP, the "Opportunity Fund Reporting Persons") is the general partner of AVAO LP. As such, each of the Opportunity Fund Reporting Persons share voting and dispositive power with respect to the shares held by AVOF.
- This percentage is calculated based upon 58,799,157 outstanding shares of Common Stock of the Issuer, as reported in the Issuer's 10-K for the fiscal year ended December 31, 2021, filed with the Securities and Exchange Commission on March 8, 2022.

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1	NAMES OF REPORTING PERSONS: ATLAS VENTURE ASSOCIATES OPPORTUNITY I, L.P.				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) \square (b) \boxtimes				
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): $\hfill\Box$				
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: 814,250 ¹			
	9	SOLE DISPOSITIVE POWER: 0			
	10	SHARED DISPOSITIVE POWER: 814,250 ¹			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 814,250 ¹				
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): $\hfill\Box$				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 1.4% ²				
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): PN				

As described in Item 5 below, AVAO LP and AVAO LLC beneficially own 814,250 shares of the Issuer's Common Stock (812,500 shares of the Issuer's Common Stock that are directly held by AVAO LP). AVAO LP is the general partner of AVAO LLC is the general partner of AVAO LP. As such, each of the Opportunity Fund Reporting Persons share voting and dispositive power with respect to the shares held by AVOF.

This percentage is calculated based upon 58,799,157 outstanding shares of Common Stock of the Issuer, as reported in the Issuer's 10-K for the fiscal year ended December 31, 2021, filed with the Securities and Exchange Commission on March 8, 2022.

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1	NAMES OF REPORTING PERSONS: ATLAS VENTURE ASSOCIATES OPPORTUNITY I, LLC		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) \square (b) \boxtimes		
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): $\hfill\Box$		
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware		
NUMBER	7 SOLE VOTING POWER: 0		
OF SHARES BENEFICIALLY	8 SHARED VOTING POWER: 814,250 ¹		
OWNED BY EACH REPORTING PERSON WITH	9 SOLE DISPOSITIVE POWER: 0		
	10 SHARED DISPOSITIVE POWER: 814,250 ¹		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 814,250 ¹		
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): $\hfill\Box$		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 1.4% ²		
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): OO		

- As described in Item 5 below, AVAO LP and AVAO LLC beneficially own 814,250 shares of the Issuer's Common Stock (812,500 shares of the Issuer's Common Stock that are owned by AVOF and 1,750 shares of the Issuer's Common Stock that are directly held by AVAO LP). AVAO LP is the general partner of AVAO LLC is the general partner of AVAO LP and AVAO LLC has voting and dispositive power over the shares held by AVOF. As such, each of the Opportunity Fund Reporting Persons share voting and dispositive power with respect to the shares held by AVOF.
- This percentage is calculated based upon 58,799,157 outstanding shares of Common Stock of the Issuer, as reported in the Issuer's 10-K for the fiscal year ended December 31, 2021, filed with the Securities and Exchange Commission on March 8, 2022.

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INTRODUCTION

This Amendment No. 2 to Schedule 13D ("Amendment No. 2") is being filed as an amendment to the statement on Schedule 13D relating to common stock, par value \$0.001 per share (the "Common Stock") of Magenta Therapeutics, Inc., a Delaware corporation (the "Issuer" or "Magenta"), as filed with the Securities and Exchange Commission (the "SEC") on July 14, 2020 (the "Initial Schedule 13D") and later amended on February 17, 2021 ("Amendment No. 1" and together with the Initial Schedule 13D, the "Prior Schedule 13D"). All capitalized terms not otherwise defined herein shall have the meanings ascribed to the terms in the Prior Schedule 13D. The Prior Schedule 13D is hereby amended and supplemented as follows and, except as expressly amended below, the Prior Schedule 13D remains in full force and effect.

ITEM 4. PURPOSE OF TRANSACTION

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

On April 13, 2021, Atlas X made a pro rata in-kind distribution for no additional consideration of 484,363 shares of Common Stock to its general partner, AVA X LP, and its limited partners. Of the shares distributed by Atlas X, AVA X LP received an aggregate of 104,471 shares.

On April 13, 2021, AVOF made a pro rata in-kind distribution for no additional consideration of 125,000 shares of Common Stock to its general partner, AVAO LP, and its limited partners. Of the shares distributed by AVOF, AVAO LP received an aggregate of 500 shares.

On March 8, 2021, AVOF made a pro rata in-kind distribution for no additional consideration of 312,500 shares of Common Stock to its general partner, AVAO LP, and its limited partners. Of the shares distributed by AVOF, AVAO LP received an aggregate of 1,250 shares.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

(a)(b) As of the date hereof, Atlas X is the record owner of 2,664,036 shares of Common Stock. AVA X LP is the general partner of Atlas X and AVA X LLC is the general partner of AVA X LP. Each of Atlas X, AVA X LP and AVA X LLC has shared voting and dispositive power over the shares held by Atlas X. As such, each of Atlas X, AVA X LP and AVA X LLC may be deemed to beneficially own the shares held by Atlas X.

As of the date hereof, AVA X LP is the record owner of 313,412 shares of Common Stock. AVA X LLC is the general partner of AVA X LP. Each of AVA X LP and AVA X LLC has shared voting and dispositive power over the shares held by AVA X LP. As such, each of AVA X LP and AVA X LLC may be deemed to beneficially own the shares held by AVA X LP.

As of the date hereof, AVOF is the record owner of 812,500 shares of Common Stock. AVAO LP is the general partner of AVOF and AVAO LLC is the general partner of AVAO LP. Each of AVOF, AVAO LP and AVAO LLC has shared voting and dispositive power over the shares held by AVOF. As such, each of AVOF, AVAO LP and AVAO LLC may be deemed to beneficially own the shares held by AVOF.

As of the date hereof, AVAO LP is the record owner of 1,750 shares of Common Stock. AVAO LLC is the general partner of AVAO LP. AVAO LLC has shared voting and dispositive power over the shares held by AVAO LP. As such, each of AVAO LP and AVAO LLC may be deemed to beneficially own the shares held by AVAO LP.

Each of the Fund X Reporting Persons and Opportunity Fund Reporting Persons may be deemed to beneficially own 5.1% and 1.4%, respectively, of the Issuer's outstanding Common Stock, which percentages are calculated based upon 58,799,157 outstanding shares of Common Stock of the Issuer, as reported in the Issuer's 10-K for the fiscal year ended December 31, 2021, filed with the Securities and Exchange Commission on March 8, 2022.

Collectively, the Reporting Persons beneficially own an aggregate of 3,791,698 shares of Common Stock, which represents 6.4% of the Issuer's outstanding Common Stock. The Fund X Reporting Persons and the Opportunity Fund Reporting Persons are under common control and as a result, the Reporting Persons may be deemed to be members of a group. However, the Reporting Persons disclaim such group membership, and this Schedule 13D shall not be deemed an admission that the Reporting Persons are members of a group for purposes of Section 13 or for any other purposes.

(c) None of the Reporting Persons have purchased or sold any shares of Common Stock during the past 60 days.

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(d) No other person is known by the Reporting Persons to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock beneficially owned by the Reporting Persons.

(e) Not applicable.

CUSIP 55910K108 Page 10 of 10 **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.

Dated: May 5, 2022

ATLAS VENTURE FUND X, L.P.

By: Atlas Venture Associates X, L.P., its general partner By: Atlas Venture Associates X, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan Title: Chief Financial Officer

ATLAS VENTURE ASSOCIATES X, L.P.

By: Atlas Venture Associates X, LLC, its general partner

By: /s/ Ommer Chohan Name: Ommer Chohan Title: Chief Financial Officer

ATLAS VENTURE ASSOCIATES X, LLC

By: /s/ Ommer Chohan Name: Ommer Chohan Title: Chief Financial Officer

ATLAS VENTURE OPPORTUNITY FUND I, L.P.

By: Atlas Venture Associates Opportunity I, L.P., its general partner By: Atlas Venture Associates Opportunity I, LLC, its general partner

By: /s/ Ommer Chohan Name: Ommer Chohan

Title: Chief Financial Officer

ATLAS VENTURE ASSOCIATES OPPORTUNITY I, L.P.

By: Atlas Venture Associates Opportunity I, LLC, its general partner

By: /s/ Ommer Chohan Name: Ommer Chohan Title: Chief Financial Officer

ATLAS VENTURE ASSOCIATES OPPORTUNITY I, LLC

By: /s/ Ommer Chohan Name: Ommer Chohan Title: Chief Financial Officer