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

**SCHEDULE 13D/A**  
Under the Securities Exchange Act of 1934  
(Amendment No. 1)\*

**SPERO THERAPEUTICS, INC.**  
(Name of Issuer)

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

84833T103  
(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)

February 12, 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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<b>1</b>	NAMES OF REPORTING PERSONS: ATLAS VENTURE FUND X, L.P.	
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY:	
<b>4</b>	SOURCE OF FUNDS (SEE INSTRUCTIONS): WC	
<b>5</b>	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): <input type="checkbox"/>	
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER: 0
	<b>8</b>	SHARED VOTING POWER: 1,031,160 <sup>1</sup>
	<b>9</b>	SOLE DISPOSITIVE POWER: 0
	<b>10</b>	SHARED DISPOSITIVE POWER: 1,031,160 <sup>1</sup>
<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 1,031,160 <sup>1</sup>	
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="checkbox"/>	
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 3.8% <sup>2</sup>	
<b>14</b>	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): PN	

1 Atlas Venture Fund X, L.P., a Delaware limited partnership (“Atlas X”), Atlas Venture Associates X, L.P., a Delaware limited partnership (“AVA X LP”) and Atlas Venture Associates X, LLC, a Delaware limited liability company (“AVA X LLC” and together with Atlas X and AVA X LP, the “Reporting Persons”) beneficially own 1,031,160 shares of the Issuer’s Common Stock. All of these shares are held by Atlas X. 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. As such, each of the Reporting Persons share voting and dispositive power with respect to the shares held by Atlas X.

2 This percentage is calculated based upon 27,187,489 outstanding shares of Common Stock of the Issuer as of October 29, 2020, as reported in the Issuer’s quarterly report on Form 10-Q for the quarter ended September 30, 2020 and filed with the Securities and Exchange Commission on November 5, 2020.

<b>1</b>	NAMES OF REPORTING PERSONS: ATLAS VENTURE ASSOCIATES X, L.P.	
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY:	
<b>4</b>	SOURCE OF FUNDS (SEE INSTRUCTIONS): AF	
<b>5</b>	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): <input type="checkbox"/>	
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER: 0
	<b>8</b>	SHARED VOTING POWER: 1,031,160 <sup>1</sup>
	<b>9</b>	SOLE DISPOSITIVE POWER: 0
	<b>10</b>	SHARED DISPOSITIVE POWER: 1,031,160 <sup>1</sup>
<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 1,031,160 <sup>1</sup>	
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="checkbox"/>	
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 3.8% <sup>2</sup>	
<b>14</b>	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): PN	

1 Atlas Venture Fund X, L.P., a Delaware limited partnership ("Atlas X"), Atlas Venture Associates X, L.P., a Delaware limited partnership ("AVA X LP") and Atlas Venture Associates X, LLC, a Delaware limited liability company ("AVA X LLC" and together with Atlas X and AVA X LP, the "Reporting Persons") beneficially own 1,031,160 shares of the Issuer's Common Stock. All of these shares are held by Atlas X. 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. As such, each of the Reporting Persons share voting and dispositive power with respect to the shares held by Atlas X.

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<b>1</b>	NAMES OF REPORTING PERSONS: ATLAS VENTURE ASSOCIATES X, LLC	
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY:	
<b>4</b>	SOURCE OF FUNDS (SEE INSTRUCTIONS): AF	
<b>5</b>	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): <input type="checkbox"/>	
<b>6</b>	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	<b>7</b>	SOLE VOTING POWER: 0
	<b>8</b>	SHARED VOTING POWER: 1,031,160 <sup>1</sup>
	<b>9</b>	SOLE DISPOSITIVE POWER: 0
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<b>11</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 1,031,160 <sup>1</sup>	
<b>12</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="checkbox"/>	
<b>13</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 3.8% <sup>2</sup>	
<b>14</b>	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): OO	

1 Atlas Venture Fund X, L.P., a Delaware limited partnership (“Atlas X”), Atlas Venture Associates X, L.P., a Delaware limited partnership (“AVA X LP”) and Atlas Venture Associates X, LLC, a Delaware limited liability company (“AVA X LLC” and together with Atlas X and AVA X LP, the “Reporting Persons”) beneficially own 1,031,160 shares of the Issuer’s Common Stock. All of these shares are held by Atlas X. 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. As such, each of the Reporting Persons share voting and dispositive power with respect to the shares held by Atlas X.

2 This percentage is calculated based upon 27,187,489 outstanding shares of Common Stock of the Issuer as of October 29, 2020, as reported in the Issuer’s quarterly report on Form 10-Q for the quarter ended September 30, 2020 and filed with the Securities and Exchange Commission on November 5, 2020.

**INTRODUCTION**

This Amendment No. 1 to Schedule 13D (“Amendment No. 1”) is being filed as an amendment to the statement on Schedule 13D relating to common stock, par value \$0.001 per share of Spero Therapeutics, Inc., a Delaware corporation (the “Issuer” or “Spero”), as filed with the Securities and Exchange Commission (the “SEC”) on March 14, 2018 (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.

This report is being filed to report that, as of the date hereof,, the Reporting Persons have ceased to be the beneficial owner of more than five percent of the Issuer’s common stock (based on the number of shares outstanding as of October 29, 2020, as disclosed in the Issuer’s Form 10-Q for the quarter ended September 30, 2020 and filed with the Securities and Exchange Commission on November 5, 2020.

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**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: February 16, 2021

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

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**EXHIBIT C**  
**JOINT FILING AGREEMENT**

Pursuant to Rule 13d-1(k)(1) promulgated pursuant to the Securities Exchange Act of 1934, as amended, the undersigned agree that the attached Schedule 13D is being filed on behalf of each of the undersigned.

Dated: February 16, 2021

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

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