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

**SCHEDULE 13G**

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

**Spero Therapeutics, Inc.**  
(Name of Issuer)

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

**84833T103**  
(CUSIP Number)

**December 31, 2017**  
(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)

\* 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 the disclosures provided in a prior cover page.

The information required in 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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CUSIP No. 84833T103

13G

1	NAME OF REPORTING PERSONS GV 2015, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  <span style="float: right;">(a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/></span>	
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  1,112,473 <sup>(1)</sup>
	6	SHARED VOTING POWER See response to row 5.
	7	SOLE DISPOSITIVE POWER 1,112,473 <sup>(2)</sup>
	8	SHARED DISPOSITIVE POWER See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	1,112,473
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	7.7% <sup>(3)</sup>
12	TYPE OF REPORTING PERSON	PN

<sup>(1)</sup> Consists of 1,112,473 shares of the Issuer's Common Stock held directly by GV 2015, L.P. GV 2015 GP, L.L.C. (the general partner of GV 2015, L.P.), Alphabet Holdings LLC (the sole member of GV 2015 GP, L.L.C.), XXVI Holdings Inc. (the managing member of Alphabet Holdings LLC), and Alphabet Inc. (the sole stockholder of XXVI Holdings Inc.) may each be deemed to have sole power to vote these shares.

<sup>(2)</sup> Consists of 1,112,473 shares of the Issuer's Common Stock held directly by GV 2015, L.P. GV 2015 GP, L.L.C. (the general partner of GV 2015, L.P.), Alphabet Holdings LLC (the sole member of GV 2015 GP, L.L.C.), XXVI Holdings Inc. (the managing member of Alphabet Holdings LLC), and Alphabet Inc. (the sole stockholder of XXVI Holdings Inc.) may each be deemed to have sole power to dispose of these shares.

<sup>(3)</sup> Based on 14,369,182 shares of the Issuer's Common Stock outstanding as of November 30, 2017 as disclosed in the Issuer's Quarterly Report on Form 10-Q, as filed with the Securities and Exchange Commission on December 14, 2017.

1	NAME OF REPORTING PERSONS GV 2015 GP, L.L.C.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
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CUSIP No. 84833T103

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1	NAME OF REPORTING PERSONS Alphabet Holdings LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  <span style="float: right;">(a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/></span>	
3	SEC USE ONLY	
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CUSIP No. 84833T103		13G	
1	NAME OF REPORTING PERSONS XXVI Holdings Inc.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP <span style="float: right;">(a) <input type="checkbox"/> (b) <input checked="checked" type="checkbox"/></span>		
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
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CUSIP No. 84833T103

13G

1	NAME OF REPORTING PERSONS Alphabet Inc.	
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<sup>(3)</sup> Based on 14,369,182 shares of the Issuer's Common Stock outstanding as of November 30, 2017 as disclosed in the Issuer's Quarterly Report on Form 10-Q, as filed with the Securities and Exchange Commission on December 14, 2017.

ITEM 1(A). NAME OF ISSUER:

Spero Therapeutics, Inc.

ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

675 Massachusetts Avenue, 14th Floor  
Cambridge, Massachusetts 02139

ITEM 2(A). NAME OF PERSONS FILING:

This statement is filed by the following individuals, collectively referred to as the "Reporting Persons":

- GV 2015, L.P., a Delaware limited partnership (the "Fund")
- GV 2015 GP, L.L.C., a Delaware limited liability company (the "General Partner")
- Alphabet Holdings LLC, a Delaware limited liability company ("Alphabet Holdings")
- XXVI Holdings Inc., a Delaware corporation ("XXVI Holdings"), and
- Alphabet Inc., a Delaware corporation ("Alphabet")

Each of the General Partner, Alphabet Holdings (the sole member of the General Partner), XXVI Holdings (the managing member of Alphabet Holdings), and Alphabet (the sole stockholder of XXVI Holdings) may be deemed to have sole power to vote or sole power to dispose of the securities owned directly by the Fund.

ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE, OR, IF NONE, RESIDENCE:

The address of the principal business office for each of the Reporting Persons is:

1600 Amphitheatre Parkway  
Mountain View, CA 94043

ITEM 2(C). CITIZENSHIP:

GV 2015, L.P. is a Delaware limited partnership, GV 2015 GP, L.L.C. is a Delaware limited liability company, Alphabet Holdings LLC is a Delaware limited liability company, XXVI Holdings Inc. is a Delaware corporation, and Alphabet Inc. is a Delaware corporation.

ITEM 2(D)/(E). TITLE OF CLASS OF SECURITIES AND CUSIP NUMBER:

Common Stock  
CUSIP # 84833T103

ITEM 3. Not Applicable.

ITEM 4. OWNERSHIP:

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

See Row 9 of cover page for each Reporting Person.

(b) Percent of Class:

See Row 11 of cover page for each Reporting Person.

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

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

See Row 5 of cover page for each Reporting Person.

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

See Row 6 of cover page for each Reporting Person.

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

See Row 7 of cover page for each Reporting Person.

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

See Row 8 of cover page for each Reporting Person.

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS:

Not Applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON:

Under certain circumstances set forth in the limited partnership agreement of GV 2015, L.P. and the limited liability company agreement of GV 2015 GP, L.L.C., the general and limited partners or members, as the case may be, of each of such entities may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the issuer owned by each such entity of which they are a general partner, limited partner, or member.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY:

Not Applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP:

Not Applicable.



ITEM 9. NOTICE OF DISSOLUTION OF GROUP:

Not Applicable.

ITEM 10. CERTIFICATION:

Not Applicable.

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: February 13, 2018

**GV 2015, L.P.**

By: GV 2015 GP, L.L.C., its General Partner

By: /s/ Daphne M. Chang  
Name: Daphne M. Chang  
Title: Authorized Signatory

**GV 2015 GP, L.L.C.**

By: /s/ Daphne M. Chang  
Name: Daphne M. Chang  
Title: Authorized Signatory

**Alphabet Holdings LLC**

By: /s/ Kathryn W. Hall  
Name: Kathryn W. Hall  
Title: Assistant Secretary

**XXVI Holdings Inc.**

By: /s/ Kathryn W. Hall  
Name: Kathryn W. Hall  
Title: Assistant Secretary

**Alphabet Inc.**

By: /s/ Kent Walker  
Name: Kent Walker  
Title: Assistant Secretary

EXHIBIT INDEX

Exhibit

Found on Sequentially  
Numbered Page

Exhibit A: Agreement of Joint Filing

12

EXHIBIT A

Agreement of Joint Filing

The undersigned hereby agree that a single Schedule 13G (or any amendment thereto) relating to the Common Stock of Spero Therapeutics, Inc. shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13G.

Date: February 13, 2018

**GV 2015, L.P.**

By: GV 2015 GP, L.L.C., its General Partner

By: /s/ Daphne M. Chang

Name: Daphne M. Chang

Title: Authorized Signatory

**GV 2015 GP, L.L.C.**

By: /s/ Daphne M. Chang

Name: Daphne M. Chang

Title: Authorized Signatory

**Alphabet Holdings LLC**

By: /s/ Kathryn W. Hall

Name: Kathryn W. Hall

Title: Assistant Secretary

**XXVI Holdings Inc.**

By: /s/ Kathryn W. Hall

Name: Kathryn W. Hall

Title: Assistant Secretary

**Alphabet Inc.**

By: /s/ Kent Walker

Name: Kent Walker

Title: Assistant Secretary