
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

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

XILIO THERAPEUTICS, INC.

(Name of Issuer)

Common Stock, par value \$0.0001 per share
(Title of Class of Securities)

98422T100
(CUSIP Number)

James Costine
SV Health Investors
71 Kingsway
London, WC2B 6ST
United Kingdom
+44 20 7421 7081

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

October 26, 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).

1	Name of reporting person SV7 Impact Medicine Fund LP	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization UNITED KINGDOM	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 1,613,632
	8	Shared voting power - 0 -
	9	Sole dispositive power 1,613,632
	10	Shared dispositive power - 0 -
11	Aggregate amount beneficially owned by each reporting person 1,613,632	
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) 6.05%(1)	
14	Type of reporting person PN	

(1) Percentage calculated using a denominator of 26,666,008 shares of Common Stock of Issuer as of October 26, 2021.

1	Name of reporting person SV7 (IMF) GP LLP	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization UNITED KINGDOM	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 1,613,632
	8	Shared voting power - 0 -
	9	Sole dispositive power 1,613,632
	10	Shared dispositive power - 0 -
11	Aggregate amount beneficially owned by each reporting person 1,613,632	
12	Check box if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/> 0	
13	Percent of class represented by amount in Row (11) 6.05%(1)	
14	Type of reporting person PN	

The following constitutes the Schedule 13D filed by the undersigned (the "Schedule 13D").

Item 1. Security and Issuer.

This statement relates to the Common Stock, par value \$0.0001 per share (the "Common Stock"), of Xilio Therapeutics, Inc. (the "Issuer"). The address of the principal executive offices of the Issuer is 828 Winter Street, Suite 300, Waltham, MA 02451.

Item 2. Identity and Background.

(a) This statement is filed by: (i) SV7 Impact Medicine Fund LP, a United Kingdom private fund limited partnership ("SV7 Impact Fund") and (ii) SV7 (IMF) GP LLP, a United Kingdom limited liability partnership ("SV7 GP"). SV7 Impact Fund and SV7 GP are sometimes individually referred to herein as a "Reporting Person" and collectively as the "Reporting Persons."

(b) The principal business address of the Reporting Persons is c/o SV Life Sciences, 71 Kingsway, London, WC2B 6ST, United Kingdom. The principal business address of any person or entity listed on Schedule A annexed hereto is set forth on Schedule A annexed hereto.

(c) The principal business of the Reporting Persons is international life sciences venture capital investments. SV7 Impact Fund is a private venture capital fund. SV7 GP is the general partner of SV7 Impact Fund. The principal business of the persons or entities listed on Schedule A annexed hereto is listed on Schedule A annexed hereto.

(d) No Reporting Person nor any person or entity listed on Schedule A annexed hereto has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) No Reporting Person nor any person or entity listed on Schedule A annexed hereto has, during the last five years, been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Each of the individuals listed on Schedule A annexed hereto are citizens of the country set forth on Schedule A annexed hereto. Each of the Reporting Persons are organized under the laws of the United Kingdom.

Item 3. Source and Amount of Funds or Other Consideration.

1,301,132 shares of Common Stock owned directly by SV7 Impact Fund were acquired on October 26, 2021 in exchange for 9,486,166 shares of Xilio Therapeutics, Inc. Series B Convertible Preferred Stock and 2,874,595 shares of Xilio Therapeutics, Inc. Series C Convertible Preferred Stock (together with the Series B Convertible Preferred Stock, the "Preferred Stock"), in connection with the closing of the initial public offering (the "IPO"). SV7 Impact Fund purchased an additional 312,500 shares of Common Stock on October 26, 2021 in connection with the IPO.

Item 4. Purpose of Transaction.

The Reporting Persons initially acquired the Preferred Stock underlying the Shares for investment purposes only. The Reporting Persons believe that the Issuer is an attractive investment opportunity. Depending upon overall market conditions, other investment opportunities available to the Reporting Persons, and the

availability of Shares at prices that would make the purchase or sale of Shares desirable, the Reporting Persons may endeavor to increase or decrease their respective positions in the Issuer through, among other things, the purchase or sale of Shares on the open market or in private transactions or otherwise, on such terms and at such times as the Reporting Persons may deem advisable.

No Reporting Person nor, to the best knowledge of the Reporting Persons, without independent verification, any other persons named in Item 2 hereof, has any present plan or proposal which would relate to or result in any of the matters set forth in subparagraphs (a) - (j) of Item 4 of Schedule 13D except as set forth herein or such as would occur upon completion of any of the actions discussed herein. The Reporting Persons intend to review their respective investments in the Issuer on a continuing basis. Depending on various factors including, without limitation, the Issuer's financial position and investment strategy, the price levels of the Shares, conditions in the securities markets and general economic and industry conditions, the Reporting Persons may in the future take such actions with respect to their respective investments in the Issuer as they deem appropriate including, without limitation, communicating with stockholders, management and the Board of Directors of the Issuer, engaging in discussions with third parties about the Issuer and the Reporting Persons' investment, making proposals to the Issuer concerning changes to the capitalization, ownership structure, board structure (including seeking board representation), or operations of the Issuer, purchasing additional Shares, selling some or all of their Shares, engaging in short selling of or any hedging or similar transaction with respect to the Shares, or changing their intention with respect to any and all matters referred to in Item 4.

Item 5. Interest in Securities of the Issuer.

(a) The aggregate percentage of Shares reported owned by each person named herein is based upon a total of 26,666,008 shares of Common Stock of the Issuer outstanding upon closing of its IPO on October 26, 2021 as indicated in the Issuer's Registration Statement on Form S-1 dated effective as of October 21, 2021.

SV7 Impact Fund and SV7 GP may each be deemed to beneficially own, in the aggregate, 1,613,632 shares of Common Stock, constituting approximately 6.05% of the Common Stock outstanding.

As of the close of business on the date of this filing, SV7 Impact Fund owned directly 1,613,632 shares of Common Stock, constituting approximately 6.05% of the Common Stock outstanding.

SV7 GP, the general partner of SV7 Impact Fund, may be deemed to beneficially own the shares held by SV7 Impact Fund. SV7 GP disclaims beneficial ownership of shares held by SV7 Impact Fund except to the extent of any pecuniary interest therein.

The investment committee of SV7 GP, comprised of the members as set forth on Schedule A, may be deemed to beneficially own the shares held by SV7 Impact Fund as it controls voting and investment decisions over the Issuer's shares held by SV7 Impact Fund by a majority vote. Each member of the investment committee disclaims beneficial ownership over shares held by SV7 Impact Fund except to the extent of any pecuniary interest therein.

(b) SV7 Impact Fund has the sole power to vote and dispose of the Shares it owns directly.

Voting and investment power over the Shares of Common Stock beneficially owned by the Reporting Persons has been delegated to SV7 GP. SV7 GP has delegated voting and investment decisions to an investment committee comprised of the members as set forth on Schedule A. Each Reporting Person and each member of the investment committee disclaims beneficial ownership of the Shares except to the extent of any respective pecuniary interest therein, as described in Item 5(a).

(c) Item 3 and Item 6 of this Schedule 13D describe all transactions in the Shares of the Issuer effected during the past sixty days by the Reporting Persons and are incorporated herein by reference. Except as set forth in such Items, none of the Reporting Persons, nor, to the best knowledge of the Reporting Persons, without independent verification, any other persons named in Item 2 hereof, has effected any transaction in the Common Stock during the past 60 days.

(d) No person other than the Reporting Persons is known to have the right to receive, or the power to direct the receipt of dividends from, or proceeds from the sale of, the Shares.

(e) Not applicable.

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

Pursuant to Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the Reporting Persons have entered into an agreement with respect to the joint filing of this statement, and any amendment or amendments thereto, a copy of which has been filed as Exhibit 99.1 to this Schedule 13D and is incorporated herein by reference.

Item 3 of this Schedule 13D describes the pre-IPO equity owned by the Reporting Persons and is incorporated herein by reference.

In connection with the IPO, SV7 Impact Fund has agreed to enter into a lock-up agreement (the "Lock-Up Agreement"), pursuant to which SV7 Impact Fund agreed, subject to certain exceptions, not to do any of the following during the period from the date of the closing of the IPO until April 21, 2022:

- (a) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of the Issuer's Common Stock beneficially owned (as such term is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended) or any other securities so owned convertible into or exercisable or exchangeable for Common Stock, or make any public announcement of an intention to do any of the foregoing; or
- (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Issuer's Common Stock.

Additionally, SV7 Impact Fund entered into an amended and restated registration rights agreement dated as of February 23, 2021 (the "Registration Rights Agreement"), with the Issuer and those other holders of Issuer convertible preferred stock. The Registration Rights Agreement provides SV7 Impact Fund with the right, following the closing of the IPO, to require the Issuer to register its shares under the Securities Act of 1933, as amended (the "Registrable Securities").

Beginning on April 21, 2022, subject to specified limitations as set forth in the Registration Rights Agreement, at any time, the holders of a majority of the then-outstanding Registrable Securities may demand that the Issuer register Registrable Securities then outstanding under the Securities Act of 1933, as amended, for purposes of a public offering having an aggregate offering price to the public of not less than \$10.0 million. The Issuer is not obligated to file a registration statement pursuant to this provision on more than two occasions.

In addition, subject to specified limitations set forth in the Registration Rights Agreement, at any time after the Issuer becomes eligible to file a registration statement on Form S-3, holders of at least 25% of the Registrable Securities then outstanding may request that the Issuer register the Registrable Securities on Form S-3 for purposes of a public offering for which the reasonably anticipated aggregate offering price to the public would exceed \$3.0 million. The Issuer is not obligated to file a registration statement pursuant to this provision on more than two occasions in any 12-month period.

If, at any time after the closing of the IPO, the Issuer proposes to register for its own account any of its securities under the Securities Act of 1933, as amended, the holders of Registrable Securities will be entitled to notice of the registration and, subject to specified exceptions, have the right to require the Issuer to register all or a portion of the Registrable Securities then held by the holders in that registration.

In the event that any registration in which the holders of Registrable Securities participate pursuant to the Registration Right Agreement is an underwritten public offering, the Issuer has agreed to enter into an underwriting agreement in usual and customary form and use its reasonable best efforts to facilitate the offering.

Pursuant to the Registration Rights Agreement, the Issuer is required to pay all registration expenses, including all registration and filing fees, exchange listing fees, printing expenses, fees and expenses not to exceed \$50,000 of one counsel selected by the selling stockholders to represent the selling stockholders, but excluding underwriting discounts, selling commissions, stock transfer taxes applicable to the sale of Registrable Securities and the fees and expenses of the selling stockholders' own counsel (other than the counsel selected to represent all selling stockholders). If a registration is withdrawn at the request of the stockholders initiating the registration, then those stockholders will bear the expenses of the registration.

The descriptions contained in this Statement on Schedule 13D of the Registration Rights Agreement are summaries only and are qualified in their entireties by the actual terms of such agreement, which is being filed as Exhibit 99.2 to this Schedule 13D and is incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

- 99.1 Joint Filing Agreement by and between SV7 Impact Fund LP and SV7 (IMF) GP LLP, dated November 3, 2021.
- 99.2 Amended and Restated Registration Rights Agreement, dated as of February 23, 2021, by and among Xilio Therapeutics, Inc., SV7 Impact Medicine Fund LP and the other parties thereto, which is incorporated herein by reference to the Issuer's registration statement on Form S-1 (Registration Statement No. 333-259973) filed with the Securities and Exchange Commission on October 1, 2021.

SIGNATURES

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

Dated: November 3, 2021

SV7 IMPACT MEDICINE FUND LP

By: SV7 (IMF) GP LLP, its General Partner

By: /s/ James Costine

Name: James Costine

Its: Authorised Member

SV7 (IMF) GP LLP

By: /s/ James Costine

Name: James Costine

Its: Authorised Member

SCHEDULE A

Information regarding members of the investment committee of SV7 (IMF) GP LLP:

<u>Name</u>	<u>Residence or Business Address</u>	<u>Present principal Occupation or Employment; Principal business of Employer</u>	<u>Name of Employer and Address where Employment is Conducted</u>	<u>Citizenship</u>
Kate Bingham	c/o SV Life Sciences 71 Kingsway London WC2B 6ST United Kingdom	Managing Partner; International life sciences venture capital investments	SV Life Sciences, 71 Kingsway, London WC2B 6ST United Kingdom	United Kingdom
Michael Ross	c/o SV Life Sciences, One Boston Place, 201 Washington Street, Suite 3900, Boston, MA 02108	Managing Partner; International life sciences venture capital investments (also a member of the board of directors of Catabasis Pharmaceuticals, Inc.)	SV Life Sciences, One Boston Place, 201 Washington Street, Suite 3900, Boston, MA 02108	USA
Houman Ashrafian	c/o SV Life Sciences 71 Kingsway London WC2B 6ST United Kingdom	Managing Partner; International life sciences venture capital investments	SV Life Sciences, 71 Kingsway, London WC2B 6ST United Kingdom	United Kingdom

JOINT FILING AGREEMENT

In accordance with Rule 16a-3(j) and Rule 13d-1(k)(1) and under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of Forms 3, 4, 5 and Schedules 13D and 13G (including any and all amendments thereto) with respect to the Common Stock, par value \$0.0001 per share, of Xilio Therapeutics, Inc. and further agree that this Joint Filing Agreement shall be included as an exhibit to such joint filings.

The undersigned further agree that each party hereto is responsible for the timely filing of such Forms 3, 4, 5 and Schedules 13D and 13G and any amendments thereto, and for the completeness and accuracy of the information concerning such party contained therein; provided that no party is responsible for the completeness or accuracy of the information concerning any other filing party, unless such party knows or has reason to believe that such information is inaccurate.

This Joint Filing Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original instrument, but all of such counterparts together shall constitute one agreement.

In evidence thereof, the undersigned, being duly authorized, hereby execute this Joint Filing Agreement as of November 3, 2021.

SV7 IMPACT MEDICINE FUND LP

By: SV7 (IMF) GP LLP, its General Partner

By: /s/ James Costine
Name: James Costine
Its: Authorised Member

SV7 (IMF) GP LLP

By: /s/ James Costine
Name: James Costine
Its: Authorised Member