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

SCHEDULE 13D

**Under the Securities Exchange Act of 1934
(Amendment No. 5)***

Sunesis Pharmaceuticals, Inc.
(Name of Issuer)

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

867328700
(CUSIP Number)

**Susan Vuong
Chief Financial Officer
Bay City Capital LLC
750 Battery Street, Suite 400
San Francisco, California 94111
(415) 676-3830**

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

October 27, 2017
(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	Names of reporting persons: BAY CITY CAPITAL FUND V, L.P.	
2	Check the appropriate box if a member of a group (see instructions): (a) <input checked="" type="checkbox"/> (b) <input 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 OF COMMON STOCK
	8	Shared voting power: 1,828,968 SHARES OF COMMON STOCK (A)
	9	Sole dispositive power: 0 SHARES OF COMMON STOCK
	10	Shared dispositive power: 1,828,968 SHARES OF COMMON STOCK (A)
11	Aggregate amount beneficially owned by each reporting person: 1,828,968 SHARES OF COMMON STOCK (A)	
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): 5.3% (B)	
14	Type of reporting person (see instructions): PN	

(A) Please see Item 5.

(B) This percentage is calculated based on 34,248,322 shares of the Issuer's Common Stock outstanding as of October 27, 2017 as reported in Issuer's 10-Q Report filed November 2, 2017

1	Names of reporting persons: BAY CITY CAPITAL FUND V CO-INVESTMENT FUND, L.P.	
2	Check the appropriate box if a member of a group (see instructions): (a) <input checked="" type="checkbox"/> (b) <input 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 OF COMMON STOCK
	8	Shared voting power: 1,828,968 SHARES OF COMMON STOCK (A)
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	10	Shared dispositive power: 1,828,968 SHARES OF COMMON STOCK (A)
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12	Check if the aggregate amount in Row (11) excludes certain shares (see instructions): <input type="checkbox"/>	
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(A) Please see Item 5.

(B) This percentage is calculated based on 34,248,322 shares of the Issuer's Common Stock outstanding as of October 27, 2017 as reported in Issuer's 10-Q Report filed November 2, 2017.

1	Names of reporting persons: BAY CITY CAPITAL MANAGEMENT V LLC	
2	Check the appropriate box if a member of a group (see instructions): (a) <input checked="" type="checkbox"/> (b) <input 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: 1,828,968 SHARES OF COMMON STOCK (A)
	8	Shared voting power: 0 SHARES OF COMMON STOCK
	9	Sole dispositive power: 1,828,968 SHARES OF COMMON STOCK (A)
	10	Shared dispositive power: 0 SHARES OF COMMON STOCK
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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): 5.3% (B)	
14	Type of reporting person (see instructions): OO	

(A) Please see Item 5.

(B) This percentage is calculated based on 34,248,322 shares of the Issuer's Common Stock outstanding as of October 27, 2017 as reported in Issuer's 10-Q Report filed November 2, 2017.

1	Names of reporting persons: BAY CITY CAPITAL LLC	
2	Check the appropriate box if a member of a group (see instructions): (a) <input checked="" type="checkbox"/> (b) <input 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"/>	
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(A) Please see Item 5.

(B) This percentage is calculated based on 34,248,322 shares of the Issuer's Common Stock outstanding as of October 27, 2017 as reported in Issuer's 10-Q Report filed November 2, 2017.

Bay City Capital LLC, a Delaware limited liability company (“BCC”), hereby files this Amendment No. 5 (“Amendment No. 5”) which amends and supplements the Schedule 13D previously filed with the United States Securities and Exchange Commission (the “SEC”) on April 13, 2009 (the “Original 13 D” and amended by Amendment No.1 filed November 3, 2009, Amendment No 2. filed July 1, 2010, Amendment No. 3 filed August 13, 2014 and Amendment No. 4 filed December 22, 2015 (the “Schedule 13 D”). on behalf of the Reporting Persons identified in Item 2 of the Schedule pursuant to the Agreement with respect to Schedule 13D attached to the Schedule 13 D as Exhibit 7.1. This Amendment is being filed to reflect changes to the Reporting Persons’ ownership of Sunesis Pharmaceuticals, Inc. (the “Issuer”) as a result of purchases of the Issuer’s common stock and warrants to purchase common stock by the Reporting Persons in the Issuer’s underwritten public offering. Except as supplemented herein, the Schedule 13 D remains in full force and effect. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

BCC is the manager of Bay City Capital Management V LLC (“Management V”), which is the general partner of Bay City Capital Fund V, L.P., a Delaware limited partnership (“Fund V”), and Bay City Capital Fund V Co-Investment Fund, L.P., a Delaware limited partnership (“Co-Investment V,” and together with Fund V, the “Purchasers”). BCC is also an advisor to Fund V and Co-Investment V.

All capitalized terms used and not expressly defined herein have the respective meanings ascribed to such terms in the Schedule 13 D.

ITEM 2. IDENTITY AND BACKGROUND.

Item 2 of the Schedule 13 D is supplemented and amended, as the case may be, as follows:

Schedule I attached hereto is incorporated herein by reference and amends and restates Schedule 1 of the Schedule 13 D in its entirety. During the last five years, neither the Reporting Person nor, to the knowledge of the Reporting Person, any of the persons identified on Schedule I to this Amendment: (i) has been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) was a 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, U.S. federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

Item 3 of the Schedule 13 D is supplemented and amended, as the case may be, as follows:

The Purchasers acquired certain of the shares of common stock in connection with an underwritten public offering (the “Offering”) by the Issuer on October 27, 2017. In the Offering, the Issuer sold a total of 7,500,000 shares of the common stock and accompanying warrants to purchase 3,750,000 shares of Common Stock (collectively, the “Shares”) for a purchase price of \$2.00 per share.

The Purchasers purchased an aggregate of 600,000 Shares as follows:

	Shares	Price Paid
Bay City Capital Fund V, L.P.	588,780*	\$785,040
Bay City Capital Fund V Co-Investment Fund, L.P.	11,220**	\$ 14,960

* Includes 392,520 shares of Common Stock and the accompanying warrants to purchase 196,260 shares of Common Stock.

** Includes 7,480 shares of Common Stock and the accompanying warrants to purchase 3,740 shares of Common Stock.

The funds used to purchase the Shares acquired in the Offering detailed above are from capital contributions from the respective partners of each of the Purchasers.

ITEM 4. PURPOSE OF TRANSACTION.

Item 4 of the Schedule 13 D is supplemented and amended, as the case may be, as follows:

The disclosure in Item 3 is incorporated by reference herein.

Fund V and Co-Investment V purchased the Shares for investment purposes with the aim of increasing the value of the investment and the Issuer.

The Purchasers hold the securities for investment purposes. Whether the Reporting Persons or their affiliates purchase any additional securities or dispose of any securities, and the amount and timing of any such transactions, will depend upon the Reporting Persons' continuing assessments of pertinent factors, including the availability of shares of common stock or other securities for purchase at particular price levels, the business and prospects of the Issuer, other business investment opportunities, economic conditions, stock market conditions, money market conditions, the attitudes and actions of the board of directors and management of the Issuer, the availability and nature of opportunities to dispose of shares in the Issuer and other plans and requirements of the particular entities. The Reporting Persons may discuss items of mutual interest with the Issuer, which could include items in subparagraphs (a) through (j).

Depending upon their assessments of the above factors from time to time, the Reporting Persons or their affiliates may change their present intentions as stated above, including assessing whether to make suggestions to the management of the Issuer regarding financing, and whether to acquire additional securities of the Issuer, including shares of common stock (by means of open market purchases, privately negotiated purchases, or otherwise) or to dispose of some or all of the securities of the Issuer, including shares of common stock, under their control.

Except as otherwise disclosed herein, at the present time, the Reporting Persons do not have any plans or proposals with respect to any extraordinary corporate transaction involving the Issuer including, without limitation, those matters described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

Item 5 of the Schedule 13 D is supplemented and amended, as the case may be, as follows:

As of the close of business on October 27, 2017, Fund V, Co-Investment Fund V, Management V and BCC owned directly and/or indirectly the following shares:

Reporting Person	Shares Held Directly(1)	Sole Voting Power	Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership(2)	Percentage Of Class(3)
Fund V	1,794,520	0	1,828,968	0	1,828,968	1,828,968	5.3%
Co-Investment V	34,196	0	1,828,968	0	1,828,968	1,828,968	5.3%
Management V(4)	0	1,828,968	0	1,828,968	0	1,828,968	5.3%
BCC(5)	252	1,828,968	0	1,828,968	0	1,828,968	5.3%

-
- (1) The shares held by Fund V include 196,260 shares of Common Stock underlying warrants which are exercisable within 60 days of the date of this filing and the shares held by Co-Investment V include 3,740 shares of Common Stock underlying warrants which are exercisable within 60 days of the date of this filing.
 - (2) Fund V, Co-Investment V, Management V and BCC constitute a “group” under Section 13(d) of the Exchange Act and consequently are deemed to have beneficial ownership of all shares held by members of the group.
 - (3) All percentages in this table are based on (i) 34,248,322 shares of common stock of the Issuer outstanding as of October 27, 2017, plus (ii) shares of common stock deemed to be outstanding pursuant to Rule 13d-3(d)(1)(i) with respect to such Reporting Person.
 - (4) Management V holds no shares of common stock directly. Management V is deemed to have beneficial ownership of common stock owned by Fund V and Co-Investment V due to its role as general partner of such funds. Investment and voting decisions by Management V are exercised by BCC as manager.
 - (5) Due to its role as manager of Management V, BCC is deemed to have beneficial ownership of common stock deemed to be beneficially owned by Management V.

The information required by Item 5 with respect to persons with whom voting or dispositive power is shared is set forth in Items 2 and 3 of the Schedule 13 D.

To the best knowledge of the Reporting Persons, no person described in this Item 5 has effected any transaction in the common stock of the Issuer during the past 60 days other than as described in Item 3.

To the best knowledge of the Reporting Persons, no person other than the Reporting Persons has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the common stock of the Issuer.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIP WITH RESPECT TO SECURITIES OF THE ISSUER

Common Stock Purchase Warrant

A copy of the Common Stock Purchase Warrant of Sunesis Pharmaceuticals, Inc. is filed as Exhibit 2 hereto and is incorporated by reference herein.

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 1 | Joint Filing Agreement (incorporated by reference to Exhibit 7.1 to the Schedule 13 D). |
| Exhibit 2 | Form of Common Stock Purchase Warrant of the Issuer, issued to Bay City Capital Fund V, L.P. and Bay City Capital Fund V Co-Investment Fund, LP pursuant to the Underwriting Agreement, dated October 25, 2017 by and among the Issuer and Cowen and Company, LLC and Wells Fargo Securities, LLC, as representatives of the underwriters (incorporated by reference to Exhibit 4.2 the Issuer’s Current Report on Form 8-K, filed October 26, 2017). |

SIGNATURE

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

Date: November 6, 2017

/s/ Fred Craves

Fred Craves, Managing Director
Bay City Capital LLC

for itself, for and on behalf of Bay City Capital Management V LLC in its capacity as manager thereof, and for and on behalf of Bay City Capital Fund V, L.P. and Bay City Capital Fund V Co-Investment Fund, L.P. in its capacity as manager of Bay City Capital Management V LLC, the general partner of Bay City Capital Fund V, L.P. and Bay City Capital Fund V Co-Investment Fund, L.P.

SCHEDULE 1

Members of Management V

Fred Craves
c/o Bay City Capital LLC
750 Battery Street, Suite 400
San Francisco, CA 94111
Principal Occupation: Chairman and Managing Director of Bay City Capital LLC
Citizenship: U.S.A.

Carl Goldfischer
c/o Bay City Capital LLC
750 Battery Street, Suite 400
San Francisco, CA 94111
Principal Occupation: Managing Director of Bay City Capital LLC
Citizenship: U.S.A.

BF5 GP Investors, LLC
71 South Wacker Drive
Chicago, IL 60606
Principal Business: Hold membership interest in Bay City Capital Management V LLC

Kirby Bartlett
11 Ridge Court
Corte Madera, CA 94925
Principal Occupation: Hold membership interest in Bay City Capital Management V LLC
Citizenship: U.S.A.

Ross Bersot
9 Las Vegas Road
Orinda, CA 94563
Principal Occupation: Hold membership interest in Bay City Capital Management V LLC
Citizenship: U.S.A.

Lionel Camot
c/o Bay City Capital LLC
750 Battery Street, Suite 400
San Francisco, CA 94111
Principal Occupation: Managing Director of Bay City Capital LLC
Citizenship: Switzerland

Jeanne Cunicelli
158 Funston Avenue
San Francisco, CA 94118
Principal Occupation: Hold membership interest in Bay City Capital Management V LLC
Citizenship: U.S.A.

William Gerber
69 Van Ripper Lane
Orinda, CA 94563
Principal Occupation: Hold membership interest in Bay City Capital Management V LLC
Citizenship: U.S.A.

Douglass Given
464 Sand Hill Circle
Menlo Park, CA 94025
Principal Occupation: Hold membership interest in Bay City Capital Management V LLC
Citizenship: U.S.A.

Robert Hopfner
54 Vista Lane
Alamo, CA 94507
Principal Occupation: Managing Director of Bay City Capital LLC
Citizenship: U.S.A.

Judy Koh
226 El Camino Del Mar
San Francisco, CA 94121
Principal Occupation: Hold membership interest in Bay City Capital Management V LLC
Citizenship: U.S.A.

Dayton Misfeldt
c/o Bay City Capital LLC
750 Battery Street, Suite 400
San Francisco, CA 94111
Principal Occupation: Managing Director of Bay City Capital LLC
Citizenship: U.S.A.

Members of BCC

Fred Craves
c/o Bay City Capital LLC
750 Battery Street, Suite 400
San Francisco, CA 94111
Principal Occupation: Chairman and Managing Director of Bay City Capital LLC
Citizenship: U.S.A.

Carl Goldfischer
c/o Bay City Capital LLC
750 Battery Street, Suite 400
San Francisco, CA 94111
Principal Occupation: Managing Director of Bay City Capital LLC
Citizenship: U.S.A.

Sanford Zweifach
694 Sausalito Blvd.
Sausalito, CA 94965
Principal Occupation: Chief Executive Officer of Ascendancy Healthcare
Citizenship: U.S.A.

EXHIBIT INDEX

- Exhibit 1 Joint Filing Agreement (incorporated by reference to Exhibit 7.1 to the Statement).
- Exhibit 2 Form of Common Stock Purchase Warrant of the Issuer, issued to Bay City Capital Fund V, L.P. and Bay City Capital Fund V Co-Investment Fund, L.P. (incorporated by reference to Exhibit 4.2 the Issuer's Current Report on Form 8-K, filed October 26, 2017).