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

SCHEDULE 13D

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

Novus Therapeutics, Inc.

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(Name of Issuer)

Common Stock, par value \$0.001 per share

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(Title of Class of Securities)

67011N105

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(CUSIP Number)

OrbiMed Israel BioFund GP Limited Partnership  
OrbiMed Israel GP Ltd.

Nissim Darvish  
89 Medinat HaYehudim St.  
Building E, 11th Floor  
Herzliya 46766, Israel  
Telephone: 972 73 2822600

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

May 2, 2019

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(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 § 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(b) 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	NAME OF REPORTING PERSONS OrbiMed Israel BioFund GP Limited Partnership	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (See Instructions) N/A	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION State of Israel	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,475,722 (1)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,475,722 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,475,722 (1)	
12	CHECK BOX 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) 31.6% (2)	
14	TYPE OF REPORTING PERSON (See Instructions) PN	

- (1) Includes (i) 3,183,314 outstanding shares of common stock, par value \$0.001 per share (the "Shares" ) of Novus Therapeutics, Inc., a Delaware corporation (the "Issuer"), and (ii) 1,292,408 Shares issuable upon the exercise of warrants to purchase Shares (the "Warrants").
- (2) This percentage is calculated based upon 14,163,663 Shares outstanding of the Issuer, as set forth in the Issuer's Rule 424(b)(5) Prospectus filed with the Securities and Exchange Commission on May 1, 2019 and includes an additional 1,292,408 Shares subject to currently exercisable Warrants held by the Reporting Persons.

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**Item 1. Security and Issuer.**

This Amendment No. 2 (“Amendment No. 2”) to the Schedule 13D supplements and amends the Statement on Schedule 13D of OrbiMed Israel BioFund GP Limited Partnership and OrbiMed Israel GP Ltd. (the “Statement”) originally filed with the Securities and Exchange Commission (the “SEC”) on May 19, 2017 and amended by Amendment No. 1 (“Amendment No. 1”) thereto filed with the SEC on March 19, 2018. This Statement relates to the common stock, par value \$0.001 per share (the “Shares”), of Novus Therapeutics, Inc., a corporation organized under the laws of Delaware (the “Issuer”), with its principal executive offices located at 19900 MacArthur Blvd., Suite 550 Irvine, California 92612. The Shares are listed on the NASDAQ Global Market under the ticker symbol “NVUS.” Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

On April 30, 2019, the Issuer entered into a securities purchase agreement (the “Purchase Agreement”) with certain institutional investors and accredited investors pursuant to which the Issuer agreed to issue and sell to the investors 3,449,112 Shares pursuant to a prospectus supplement dated April 30, 2019 and filed under Rule 424(b)(5) (File No. 333-207359) (the “Offering”). Concurrently with the Offering, and pursuant to the Purchase Agreement, the Company also commenced a private placement whereby it issued and sold to the investors immediately exercisable eighteen-month warrants to purchase up to 3,449,112 Shares at an exercise price of \$4.00 per Share (the “Series A Warrants”) and five-year warrants to purchase up to 3,449,112 Shares at an exercise price of \$4.00 per Share that become exercisable only upon the exercise of the Series A Warrants (the “Series B Warrants,” and, collectively with the Series A Warrants, the “Warrants”) (the “Private Placement”). As a result of the Offering and the Private Placement, the percentage of outstanding Shares that the Reporting Persons may be deemed to beneficially own was increased by more than one percent of the Issuer’s Shares outstanding since the filing of Amendment No. 1.

**Item 2. Identity and Background.**

(a) This Statement is being jointly filed by OrbiMed Israel GP Ltd., an Israeli limited liability company (“OrbiMed Israel”), and OrbiMed Israel BioFund GP Limited Partnership, an Israeli limited partnership (“OrbiMed BioFund”) (together, the “Reporting Persons” and each, a “Reporting Person”).

(b) – (c) OrbiMed Israel, a company that acts as general partner of certain limited partnerships, is the general partner of OrbiMed BioFund, which is the general partner of OrbiMed Israel Partners Limited Partnership, an Israeli limited partnership (“OrbiMed Partners”), which holds the securities to which this Statement relates.

The address of the principal office of each Reporting Person is 89 Medinat HaYehudim St., Build E, 11th Floor, Herzliya 46766 Israel.

The name, business address, present principal occupation or employment and citizenship of each of the directors, executive officers and partners (as applicable) of the Reporting Persons are set forth in Schedules I and II hereto and are incorporated herein by reference.

(d) – (e) During the last five years, none of the Reporting Persons nor, to the best of their knowledge, any of the persons listed in Schedule I and II hereto, has been: (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) 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, federal or state securities laws or finding any violation with respect to such laws.

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

Pursuant to its authority under the limited partnership agreement of OrbiMed Partners, OrbiMed OrbiMed BioFund, as general partner of OrbiMed Partners, cause OrbiMed Partners to purchase 646,204 Shares in the Offering and 646,204 Series A Warrants and 646,204 Series B Warrants in the Private Placement, both of which closed on May 2, 2019, at an aggregate price of \$2,000,001.38 using the working capital of OrbiMed Partners.

As a result of the transactions described in this Item 3, the Reporting Persons may be deemed to be the beneficial owners of approximately 31.6% of the outstanding Shares. OrbiMed BioFund, as the general partner of OrbiMed Partners may be deemed to be the beneficial owner of approximately 31.6% of the outstanding Shares. OrbiMed Israel, as the general partner of OrbiMed BioFund, may be deemed to be the beneficial owner of approximately 31.6% of the outstanding Shares.

**Item 4. Purpose of Transaction.**

This Amendment No. 2 to the Statement relates to the transactions by the Reporting Persons more fully described in Item 3 above. The Reporting Persons caused OrbiMed Partners to acquire Shares and Warrants for the purpose of making an investment in the Issuer and not for the intention of acquiring control of the Issuer’s business on behalf of OrbiMed Partners.

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The Reporting Persons from time to time intend to review their investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's Shares in particular, as well as other developments and other investment opportunities. Based upon such review, the Reporting Persons will take such actions in the future as the Reporting Persons may deem appropriate in light of the circumstances existing from time to time. If the Reporting Persons believe that further investment in the Issuer is attractive, whether because of the market price of the Shares or otherwise, they may acquire Shares (including in the form of ADSs) or other securities of the Issuer either in the open market or in privately negotiated transactions. Similarly, depending on market and other factors, the Reporting Persons may determine to dispose of some or all of the Shares currently owned by the Reporting Persons or otherwise acquired by the Reporting Persons either in the open market or in privately negotiated transactions.

Except as set forth in this Statement, the Reporting Persons have not formulated any plans or proposals which relate to or would result in: (a) the acquisition by any person of additional securities of the Issuer or the disposition of securities of the Issuer; (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries; (c) a sale or transfer of a material amount of the assets of the Issuer or any of its subsidiaries; (d) any change in the present Board or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the Board; (e) any material change in the Issuer's capitalization or dividend policy; (f) any other material change in the Issuer's business or corporate structure; (g) any change in the Issuer's charter or bylaws or other instrument corresponding thereto or other action which may impede the acquisition of control of the Issuer by any person; (h) causing a class of the Issuer's securities to be deregistered or delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a national securities association; (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); or (j) any action similar to any of those enumerated above.

**Item 5. Interest in Securities of the Issuer.**

(a)-(b) As of the date of this filing, the Reporting Persons may be deemed, for purposes of Rule 13d-3 of the Exchange Act, directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the Shares described in Item 6 below. Based upon information contained in the Issuer's Rule 424(b)(5) Prospectus filed with the Securities and Exchange Commission on May 1, 2019, such Shares constitute approximately 31.6% of the issued and outstanding Shares. OrbiMed Israel, pursuant to its authority as the sole general partner of OrbiMed BioFund, the sole general partner of OrbiMed Partners, may be deemed to indirectly beneficially own the shares of Shares held by OrbiMed Partners. OrbiMed BioFund, pursuant to its authority as the general partner of OrbiMed Partners, may be deemed to indirectly beneficially own the shares of Shares held by OrbiMed Partners. As a result, OrbiMed Israel and OrbiMed BioFund and OrbiMed Partners share the power to direct the vote and to direct the disposition of the shares of Shares described in Item 6 below.

(c) Other than as discussed in Item 3, the Reporting Persons have not effected any transactions in the Shares during the past sixty (60) days.

(d) Not applicable.

(e) Not applicable.

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

In addition to the relationships between the Reporting Persons described in Items 2, 3, and 5 above, OrbiMed BioFund is the sole general partner of OrbiMed Partners pursuant to the terms of the limited partnership agreement of OrbiMed Partners. OrbiMed Israel is the sole general partner of OrbiMed BioFund, pursuant to the terms of the limited partnership agreement of OrbiMed BioFund. As a result, OrbiMed BioFund has the power to direct the vote and to direct the disposition of the Shares held by OrbiMed Partners and such power is exercised through OrbiMed Israel. OrbiMed Israel exercises this investment power through an investment committee (the "Committee") comprised of Carl L. Gordon, Jonathan T. Silverstein, Nissim Darvish, Anat Naschitz and Erez Chimovits ("Chimovits"), each of whom disclaims beneficial ownership of the Shares held by OrbiMed Partners, except to the extent of their pecuniary interest therein. As a result, OrbiMed BioFund and OrbiMed Israel may be deemed directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the Shares held by OrbiMed Partners and to share power to direct the vote and the disposition of the Shares held by OrbiMed Partners. The number of outstanding Shares attributable to OrbiMed Partners is 4,475,722 Shares which includes Warrants to purchase 1,292,408 Shares. OrbiMed Israel maybe be considered to hold indirectly 4,475,722 Shares, and OrbiMed BioFund may be considered to hold indirectly 4,475,722 Shares, which, in each case includes Warrants to purchase 1,292,408 Shares.

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The Reporting Persons designated Chimovits to serve as a member of the Board of Directors of the Issuer, and, accordingly, the Reporting Persons may have the ability to affect and influence control of the Issuer. From time to time, Chimovits may receive stock options or other awards of equity based compensation pursuant to the Issuer's compensation arrangements for non-employee directors. Chimovits is obligated to transfer any Shares issued under any such stock options or other awards, or the economic benefit thereof, to OrbiMed Israel or an affiliate, which will in turn ensure that such Shares or economic benefits are provided to OrbiMed Partners.

Except as described above or elsewhere in this Statement or incorporated by reference in this Statement, there are no contracts, arrangements, understandings or relationships (legal or otherwise) between any of the Reporting Persons or, to the best of their knowledge, any of the persons named in Schedule B to this Statement or between any of the Reporting Persons and any other person or, to the best of their knowledge, any person named in Schedule B to this Statement and any other person with respect to any securities of the Issuer, including, but not limited to, transfer or voting of any securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or losses, or the giving or withholding of proxies.

#### ***Purchase Agreement***

In connection with the Offering and Private Placement, the Issuer entered into a Purchase Agreement with OrbiMed Partners and certain other parties, pursuant to which, on May 2, 2019, OrbiMed Partners (i) purchased 646,204 Shares and (ii) received Warrants to purchase 1,292,408 Shares, for an aggregate purchase price of \$2,000,001.38. Pursuant to the Purchase Agreement, the Issuer is required to file a registration statement on Form S-3 as soon as reasonably practicable providing for the resale by the purchasers of the Shares issuable upon exercise of the Warrants (the "Warrant Shares"), and to use commercially reasonable efforts to have the registration statement declared effective within 181 days following the closing of the Offering and Private Placement and to keep such registration statement effective at all times until no purchaser owns any Warrants or Warrant Shares.

The foregoing description of the Purchase Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Purchase Agreement, a form of which is included in this Amendment No. 2 as Exhibit 2 and incorporated herein by reference.

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**Item 7. Materials to be Filed as Exhibits.**

<b>Exhibit No.</b>	<b>Description</b>
1.	Joint Filing Agreement between OrbiMed Israel GP Ltd. and OrbiMed Israel BioFund GP Limited Partnership.
2.	Securities Purchase Agreement by and among the Issuer and the Purchasers set forth therein dated April 30, 2019 (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K (File No. 001-36620), filed May 2, 2019).

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**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.

Dated: May 6, 2019

ORBIMED ISRAEL BIOFUND GP LIMITED PARTNERSHIP

By: OrbiMed Israel GP Ltd., its General Partner

By: /s/ Nissim Darvish

Nissim Darvish  
Director

ORBIMED ISRAEL GP LTD.

By: /s/ Nissim Darvish

Nissim Darvish  
Director

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**SCHEDULE I**

The name and present principal occupation of each of the executive officers and directors of OrbiMed Israel GP Ltd. are set forth below. Unless otherwise noted, all of these persons are Israeli citizens and have as their business address 89 Medinat HaYehudim St., Build E, 11th Floor, Herzliya 46766, Israel.

Name	Position with Reporting Person	Principal Occupation
Carl L. Gordon American citizen	Director	Member OrbiMed Advisors LLC 601 Lexington Avenue, 54th Floor New York, NY 10022
Nissim Darvish	Director	Senior Managing Director OrbiMed Israel Partners Limited
Jonathan T. Silverstein American citizen	Director	Member OrbiMed Advisors LLC 601 Lexington Avenue, 54th Floor New York, NY 10022

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## SCHEDULE II

The business and operations of OrbiMed Israel BioFund GP Limited Partnership are managed by the executive officers and directors of its general partner, OrbiMed Israel GP Ltd.

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**EXHIBIT A**

**JOINT FILING AGREEMENT**

The undersigned hereby agree that the Statement on this Schedule 13D, dated May 6, 2019 (the "Schedule 13D"), with respect to the Shares of Novus Therapeutics, Inc. is filed on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities and Exchange Act of 1934, as amended, and that this Agreement shall be included as an Exhibit to this Schedule 13D. Each of the undersigned agrees to be responsible for the timely filing of the Schedule 13D, and for the completeness and accuracy of the information concerning itself contained therein. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the 6th day of May, 2019.

ORBIMED ISRAEL BIOFUND GP LIMITED PARTNERSHIP

By: OrbiMed Israel GP Ltd., its General Partner

By: /s/ Nissim Darvish

Nissim Darvish

Director

ORBIMED ISRAEL GP LTD.

By: /s/ Nissim Darvish

Nissim Darvish

Director

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