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

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 1)

Enliven Therapeutics, Inc.

(Name of Issuer)

COMMON STOCK

(Title of Class of Securities)

29337E102

(CUSIP Number)

OrbiMed Advisors LLC OrbiMed Capital GP VII LLC OrbiMed Genesis GP LLC OrbiMed Capital LLC

601 Lexington Avenue, 54th Floor New York, NY 10022 Telephone: (212) 739-6400

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

April 2, 2024

(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(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).

CUSIP No. 29337E102

1	Names of Reporting Persons. OrbiMed Advisors LLC			
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) □ (b) □			
3	SEC Us	SEC Use Only		
4	Source of AF	Source of Funds (See Instructions) AF		
5	Check it	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)		
6	Citizenship or Place of Organization Delaware			
NUMBEI SHARI		7	Sole Voting Power 0	
BENEFICI	TALLY	8	Shared Voting Power 8,951,463	
EACH REPORT PERSC	TING 9		Sole Dispositive Power 0	
WITH		10	Shared Dispositive Power 8,951,463	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 8,951,463			
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13	Percent of Class Represented by Amount in Row (11) 19.2%*			
14	Type of Reporting Person (See Instructions) IA			

CUSIP No. 29337E102

1	Names o OrbiMe	Names of Reporting Persons. OrbiMed Capital GP VII LLC			
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) □ (b) □				
3	SEC Us	e Only			
4	Source of AF	Source of Funds (See Instructions) AF			
5	Check it	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)			
6	Citizenship or Place of Organization Delaware				
NUMBEI SHARI		7	Sole Voting Power 0		
BENEFICI	CIALLY	8	Shared Voting Power 8,663,349		
EACH REPORT PERSC	ING	9	Sole Dispositive Power 0		
WITH		10	Shared Dispositive Power 8,663,349		
11	Aggregate Amount Beneficially Owned by Each Reporting Person 8,663,349				
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)				
13	Percent of Class Represented by Amount in Row (11) 18.5%*				
14	Type of Reporting Person (See Instructions) OO				

CUSIP No. 29337E102

1	Names of Reporting Persons. OrbiMed Genesis GP LLC			
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) □ (b) □			
3	SEC Use	SEC Use Only		
4	Source of AF	Source of Funds (See Instructions) AF		
5	Check if	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)		
6	Citizenship or Place of Organization Delaware			
NUMBEF SHARE		7	Sole Voting Power 0	
BENEFICL	ALLY	8	Shared Voting Power 288,114	
EACH REPORT PERSO	ING	9	Sole Dispositive Power 0	
WITH		10	Shared Dispositive Power 288,114	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 288,114			
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13	Percent of Class Represented by Amount in Row (11) 0.6%*			
14	Type of Reporting Person (See Instructions) OO			

1	Names of Reporting Persons. OrbiMed Capital LLC			
2	Check th (a) \square (b) \square			
3	SEC Use	Only		
4	Source o AF	Source of Funds (See Instructions) AF		
5	Check if	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)		
6		Citizenship or Place of Organization Cayman Islands		
NUMBER	-	7	Sole Voting Power 46,875	
SHARE BENEFICIA OWNED	ALLY	8	Shared Voting Power 0	
EACH REPORTI PERSO	ING	9	Sole Dispositive Power 46,875	
WITH		10	Shared Dispositive Power 0	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 46,875			
12	Check if	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)		
13	Percent of Class Represented by Amount in Row (11) 0.1%*			
14	Type of Reporting Person (See Instructions) IA			

Item 1. Security and Issuer

This Amendment No. 1 ("<u>Amendment No. 1</u>") to Schedule 13D supplements and amends the Statement on Schedule 13D of OrbiMed Advisors LLC and OrbiMed Capital GP VII LLC originally filed with the Securities and Exchange Commission (the "SEC") on February 28, 2023. This Amendment No. 1 relates to the common stock, par value \$0.001 per share (the "<u>Shares</u>") of Enliven Therapeutics, Inc., a corporation organized under the laws of Delaware (the "<u>Issuer</u>"), with its principal executive offices located at 6200 Lookout Road, Boulder, Colorado 80301. The Shares are listed on the NASDAQ Global Select Market under the ticker symbol "ELVN". Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

This Amendment No. 1 is being filed to report that the beneficial ownership of the outstanding Shares held by the Reporting Persons (as defined below) decreased by more than 1% as a result of an increase in the number of Shares outstanding.

Item 2. Identity and Background

(a) This Amendment No. 1 is being filed by OrbiMed Advisors LLC ("OrbiMed Advisors"), OrbiMed Capital GP VII LLC ("OrbiMed GP"), OrbiMed Genesis GP LLC ("OrbiMed Genesis"), and OrbiMed Capital LLC ("OrbiMed Capital") (collectively, the "Reporting Persons").

(b) - (c), (f) OrbiMed Advisors, a limited liability company organized under the laws of Delaware and a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the managing member or general partner of certain entities as more particularly described in Item 6 below. OrbiMed Advisors has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed GP, a limited liability company organized under the laws of Delaware, is the general partner of a limited partnership as more particularly described in Item 6 below. OrbiMed GP has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed Genesis, a limited liability company organized under the laws of Delaware, is the general partner of a limited partnership as more particularly described in Item 6 below. OrbiMed Genesis has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed Capital, a limited liability company organized under the laws of Delaware and a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the investment adviser of certain entities as more particularly described in Item 6 below. OrbiMed Capital has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

The directors and executive officers of OrbiMed Advisors, OrbiMed Capital, OrbiMed GP, and OrbiMed Genesis are set forth on Schedules I, II, III, and IV, respectively, attached hereto. Schedules I, II, and IV set forth the following information with respect to each such person:

(i) name;

(ii) business address;

(iii) present principal occupation of employment and the name, principal business and address of any corporation or other organization in which such employment is conducted; and

(iv) citizenship.

(d) - (e) During the last five years, neither the Reporting Persons nor any Person named in Schedules I through IV 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

Not applicable.

Item 4. Purpose of Transaction

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 Shares or otherwise, they may acquire Shares 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 Schedule 13D, 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 of Directors 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 of the Issuer, (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 registered 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 Act or (j) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer

(a) - (b) The following disclosure is based upon 46,704,776 outstanding Shares of the Issuer, as reported by Bloomberg L.P. on April 2, 2024.

As of the date of this filing, OrbiMed Private Investments VII, LP ("<u>OPI VII</u>"), a limited partnership organized under the laws of Delaware, holds 8,663,349 Shares constituting approximately 18.5% of the issued and outstanding Shares. OrbiMed GP is the general partner of OPI VII, pursuant to the terms of the limited partnership agreement of OPI VII, and OrbiMed Advisors is the managing member of OrbiMed GP, pursuant to the terms of the limited liability company agreement of OrbiMed GP. As a result, OrbiMed Advisors and OrbiMed GP share power to direct the vote and disposition of the Shares held by OPI VII and may be deemed directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the Shares held by OPI VII. Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the Shares held by OPI VII.

As of the date of this filing, OrbiMed Genesis Master Fund, L.P. ("<u>Genesis</u>"), a limited partnership organized under the laws of the Cayman Islands, holds 288,114 Shares constituting approximately 0.6% of the issued and outstanding Shares. OrbiMed Genesis is the general partner of Genesis, pursuant to the terms of the limited partnership agreement of Genesis, and OrbiMed Advisors is the managing member of OrbiMed Genesis, pursuant to the terms of the limited liability company agreement of OrbiMed Genesis. As a result, OrbiMed Advisors and OrbiMed Genesis share power to direct the vote and disposition of the Shares held by Genesis and may be deemed, directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the Shares held by Genesis. OrbiMed Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the Shares held by Genesis.

As of the date of this filing, The Biotech Growth Trust PLC ("<u>BIOG</u>"), a publicly-listed investment trust organized under the laws of England, holds 46,875 Shares constituting approximately 0.1% of the issued and outstanding Shares. OrbiMed Capital is the investment advisor of BIOG. As a result, OrbiMed Capital has the power to direct the vote and disposition of the Shares held by BIOG and may be deemed directly or indirectly, including by reason of mutual affiliation, to be the beneficial owner of the Shares held by BIOG. OrbiMed Capital disclaims any beneficial ownership over the shares of the other Reporting Persons. OrbiMed Capital exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the Shares held by BIOG.

- (c) Not applicable.
- (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 and 5 above, OrbiMed GP is the general partner of OPI VII, pursuant to the terms of the limited partnership agreement of OPI VII. Pursuant to this agreement and relationship, OrbiMed GP has discretionary investment management authority with respect to the assets of OPI VII. Such authority includes the power to vote and otherwise dispose of securities held by OPI VII. The number of outstanding Shares of the Issuer attributable to OPI VII is 8,663,349. OrbiMed GP, pursuant to its authority under the limited partnership agreement of OPI VII, may be considered to hold indirectly 8,663,349 Shares.

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, OrbiMed Genesis is the general partner of Genesis, pursuant to the terms of the limited partnership agreement of Genesis. Pursuant to this agreement and relationship, OrbiMed Genesis has discretionary investment management authority with respect to the assets of Genesis. Such authority includes the power to vote and otherwise dispose of securities held by Genesis. The number of outstanding Shares of the Issuer attributable to Genesis is 288,114. OrbiMed Genesis, pursuant to its authority under the limited partnership agreement of Genesis, may be considered to hold indirectly 288,114 Shares.

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, OrbiMed Advisors is the managing member of OrbiMed GP and OrbiMed Genesis, pursuant to the terms of the limited liability company agreements of OrbiMed GP and OrbiMed Genesis. Pursuant to these agreements and relationships, OrbiMed Advisors and OrbiMed GP have discretionary investment management authority with respect to the assets of OPI VII and OrbiMed Advisors and OrbiMed GP to vote and otherwise dispose of securities held by OPI VII and OrbiMed Genesis. The number of outstanding Shares attributable to OPI VII is 8,663,349 Shares and the number of outstanding Shares attributable to Genesis is 288,114. OrbiMed Advisors, pursuant to its authority under the terms of the limited liability company agreements of OrbiMed GP and OrbiMed GP to vote and otherwise dispose of securities held by OPI VII and OrbiMed Genesis. The number of outstanding Shares attributable to OPI VII is 8,663,349 Shares and the number of outstanding Shares attributable to Genesis is 288,114. OrbiMed Advisors, pursuant to its authority under the terms of the limited liability company agreements of OrbiMed GP and OrbiMed GP

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, OrbiMed Capital is the portfolio manager to BIOG. OrbiMed Capital may be deemed to have voting and investment power over the securities held by BIOG. Such authority includes the power of OrbiMed Capital to vote and otherwise dispose of securities held by BIOG. The number of outstanding Shares attributable to BIOG is 46,875 Shares. OrbiMed Capital, as the portfolio manager to BIOG, may also be considered to hold indirectly 46,875 Shares.

Rishi Gupta ("<u>Gupta</u>"), an employee of OrbiMed Advisors, is a member of the Board of Directors of the Issuer and, accordingly, OrbiMed Advisors and OrbiMed GP may have the ability to affect and influence control of the Issuer. From time to time, Gupta may receive stock options or other awards of equity-based compensation pursuant to the Issuer's compensation arrangements for non-employee directors. Pursuant to an agreement with OrbiMed Advisors and OrbiMed GP, Gupta is obligated to transfer any securities issued under any such stock options or other awards, or the economic benefit thereof, to OrbiMed Advisors and OrbiMed GP, which will in turn ensure that such securities or economic benefits are provided to OPI VII.

Exhibit	Description
1	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital LLC, OrbiMed Capital GP VII LLC, and OrbiMed Genesis GP LLC.

Signature

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: April 4, 2023

ORBIMED ADVISORS LLC

By:/s/ Carl L. Gordon Name: Carl L. Gordon Title: Member

ORBIMED CAPITAL GP VII LLC

By:ORBIMED ADVISORS LLC, its managing member

By:/<u>s/ Carl L. Gordon</u> Name: Carl L. Gordon Title: Member of OrbiMed Advisors LLC

ORBIMED GENESIS GP LLC

By:ORBIMED ADVISORS LLC, its managing member

By: <u>/s/ Carl L. Gordon</u> Name: Carl L. Gordon Title: Member of OrbiMed Advisors LLC

ORBIMED CAPITAL LLC

By:<u>s/ Carl L. Gordon</u> Name: Carl L. Gordon Title: Member

SCHEDULE I

The names and present principal occupations of each of the executive officers and directors of OrbiMed Advisors LLC are set forth below. Unless otherwise noted, each of these persons is a United States citizen and has a business address of 601 Lexington Avenue, 54th Floor, New York, NY 10022.

Name	Position with Reporting Person	Principal Occupation
Carl L. Gordon	Member	Member OrbiMed Advisors LLC
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Advisors LLC
W. Carter Neild	Member	Member OrbiMed Advisors LLC
Geoffrey C. Hsu	Member	Member OrbiMed Advisors LLC
C. Scotland Stevens	Member	Member OrbiMed Advisors LLC
David P. Bonita	Member	Member OrbiMed Advisors LLC
Peter A. Thompson	Member	Member OrbiMed Advisors LLC
Matthew S. Rizzo	Member	Member OrbiMed Advisors LLC
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Advisors LLC

SCHEDULE II

The names and present principal occupations of each of the executive officers and directors of OrbiMed Capital LLC are set forth below. Unless otherwise noted, each of these persons is a United States citizen and has a business address of 601 Lexington Avenue, 54th Floor, New York, NY 10022.

Name	Position with Reporting Person	Principal Occupation
Carl L. Gordon	Member	Member OrbiMed Capital LLC
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Capital LLC
W. Carter Neild	Member	Member OrbiMed Capital LLC
Geoffrey C. Hsu	Member	Member OrbiMed Capital LLC
C. Scotland Stevens	Member	Member OrbiMed Capital LLC
David P. Bonita	Member	Member OrbiMed Capital LLC
Peter A. Thompson	Member	Member OrbiMed Capital LLC
Matthew S. Rizzo	Member	Member OrbiMed Capital LLC
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Capital LLC

SCHEDULE III

The business and operations of OrbiMed Capital GP VII LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth in Schedule I attached hereto.

SCHEDULE IV

The business and operations of OrbiMed Genesis GP LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth in Schedule I attached hereto.

Exhibit	Description
1	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital LLC, OrbiMed Capital GP VII LLC, and OrbiMed Genesis GP LLC.

JOINT FILING AGREEMENT

The undersigned hereby agree that Amendment No. 1 to the Statement on Schedule 13D, dated April 2, 2024, with respect to the common stock of Enliven 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 Exchange Act of 1934, as amended. Each of the undersigned agrees to be responsible for the timely filing of this Statement, 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 4th day of April 2024.

ORBIMED ADVISORS LLC

By: <u>/s/ Carl L. Gordon</u> Name: Carl L. Gordon Title: Member

ORBIMED CAPITAL GP VII LLC

- By: ORBIMED ADVISORS LLC, its managing member
- By: <u>/s/ Carl L. Gordon</u> Name: Carl L. Gordon Title: Member of OrbiMed Advisors LLC

ORBIMED GENESIS GP LLC

- By: ORBIMED ADVISORS LLC, its managing member
- By: <u>/s/ Carl L. Gordon</u> Name: Carl L. Gordon Title: Member of OrbiMed Advisors LLC

ORBIMED CAPITAL LLC

By: <u>s/ Carl L. Gordon</u> Name: Carl L. Gordon Title: Member