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

## **SCHEDULE 13D**

## Under the Securities Exchange Act of 1934

## **MBX Biosciences, Inc.**

(Name of Issuer)

## **Common Stock**

(Title of Class of Securities)

## 55287L101

(CUSIP Number)

## OrbiMed Advisors LLC OrbiMed Capital GP VII LLC OrbiMed Genesis GP 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)

### September 16, 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. 55287L101

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 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)			
6	Citizenship or Place of Organization Delaware			
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		Sole Voting Power 0	
BEN			Shared Voting Power 3,812,215	
RE			Sole Dispositive Power 0	
			Shared Dispositive Power 3,812,215	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 3,812,215			
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13	Percent of Class Represented by Amount in Row (11) 12.0%*			
14	Type of Reporting Person (See Instructions) IA			

\*This percentage is calculated based upon 31,853,698 shares of common stock, par value 0.0001 per share, outstanding of MBX Biosciences, Inc. (the "<u>Issuer</u>") following the closing of the Issuer's initial public offering, as set forth in the Issuer's Rule 424(b)(5) Prospectus filed with the Securities and Exchange Commission on September 13, 2024, without giving effect to an additional 1,530,000 shares that may be issued and sold by the Issuer to the underwriters pursuant to the underwriters' option.

# CUSIP No. 55287L101

1	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 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)			
6	Citizenship or Place of Organization Delaware			
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		Sole Voting Power 0	
BENI			Shared Voting Power 3,158,428	
RE			Sole Dispositive Power 0	
			Shared Dispositive Power 3,158,428	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 3,158,428			
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13	Percent of Class Represented by Amount in Row (11) 9.9%*			
14	Type of Reporting Person (See Instructions) OO			

\*This percentage is calculated based upon 31,853,698 shares of common stock, par value 0.0001 per share, outstanding of MBX Biosciences, Inc. (the "<u>Issuer</u>") following the closing of the Issuer's initial public offering, as set forth in the Issuer's Rule 424(b)(5) Prospectus filed with the Securities and Exchange Commission on September 13, 2024, without giving effect to an additional 1,530,000 shares that may be issued and sold by the Issuer to the underwriters pursuant to the underwriters' option.

# CUSIP No. 55287L101

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 Only	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)			
6	Citizenship or Place of Organization Delaware			
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		Sole Voting Power 0	
BEN			Shared Voting Power 653,787	
			Sole Dispositive Power 0	
1			Shared Dispositive Power 653,787	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 653,787			
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13	Percent of Class Represented by Amount in Row (11) 2.1%*			
14	Type of Reporting Person (See Instructions) OO			

\*This percentage is calculated based upon 31,853,698 shares of common stock, par value \$0.0001 per share, outstanding of MBX Biosciences, Inc. (the "Issuer") following the closing of the Issuer's initial public offering, as set forth in the Issuer's Rule 424(b)(5) Prospectus filed with the Securities and Exchange Commission on September 13, 2024, without giving effect to an additional 1,530,000 shares that may be issued and sold by the Issuer to the underwriters pursuant to the underwriters' option.

### Item 1. Security and Issuer

This Statement on Schedule 13D (this "<u>Statement</u>") relates to the common stock, par value \$0.0001 per share (the "<u>Shares</u>"), of MBX Biosciences, Inc., a corporation organized under the laws of Delaware (the "<u>Issuer</u>"), with its principal executive offices located at 11711 N. Meridian Street, Suite 300, Carmel, Indiana 46032. The Shares are listed on the NASDAQ Global Select Market under the ticker symbol "MBX". Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

On September 16, 2024, the Issuer completed its initial public offering pursuant to which the Issuer agreed to issue and sell 10,200,000 Shares to the participants in the offering (the "<u>IPO</u>"). In addition, the Issuer granted the underwriters of the IPO an option to purchase, at the public offering price less any underwriting discounts and commissions, up to an additional 1,530,000 Shares. The purchase price for each Share was \$16.00. As a result of the IPO, the Issuer's total number of outstanding Shares increased to 31,853,698 (without giving effect to the additional 1,530,000 shares that may be issued and sold by the Issuer to the underwriters pursuant to the underwriters' option).

## Item 2. Identity and Background

(a) This Statement is being filed by OrbiMed Advisors LLC ("<u>OrbiMed Advisors</u>"), OrbiMed Capital GP VII LLC, ("<u>GP VII</u>"), and OrbiMed Genesis GP LLC ("<u>OrbiMed Genesis</u>") (collectively, the "<u>Reporting Persons</u>").

(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.

GP VII, 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. GP VII 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.

The directors and executive officers of OrbiMed Advisors, GP VII, and OrbiMed Genesis are set forth on Schedules I, II, and III, respectively, attached hereto. Schedules I through III 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 or II 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

On July 16, 2020, OrbiMed Advisors and GP VII, pursuant to their authority under the limited partnership agreement of OrbiMed Private Investments VII, LP ("<u>OPI VII</u>"), as more particularly described in Item 6 below, caused OPI VII to purchase 8,248,423 shares of Series A preferred stock of the Issuer at a price of \$0.687 per share.

On November 12, 2021, OrbiMed Advisors and GP VII, pursuant to their authority under the limited partnership agreement of OPI VII, as more particularly described in Item 6 below, caused OPI VII to purchase 4,124,211 shares of Series A preferred stock of the Issuer at a price of \$0.687 per share.

On November 7, 2022, OrbiMed Advisors and GP VII, pursuant to their authority under the limited partnership agreement of OPI VII, as more particularly described in Item 6 below, caused OPI VII to purchase 5,118,094 shares of Series B convertible preferred stock of the Issuer at a price of \$0.90 per share and 2,920,619 shares of Series B convertible preferred stock of the Issuer through the conversion of a convertible note funded on August 16, 2022, which convertible note and related interest converted at \$0.81 per share pursuant to the terms of the convertible note agreement.

On August 15, 2023, OrbiMed Advisors and GP VII, pursuant to their authority under the limited partnership agreement of OPI VII, as more particularly described in Item 6 below, caused OPI VII to purchase 11,548,571 shares of Series B convertible preferred stock of the Issuer at a price of \$0.90 per share.

On August 2, 2024, OrbiMed Advisors and OrbiMed Genesis, pursuant to their authority under the limited partnership agreement of OrbiMed Genesis Master Fund, L.P. ("<u>Genesis</u>"), as more particularly described in Item 6 below, caused Genesis to purchase 403,787 shares of Series C convertible preferred stock of the Issuer at a price of \$1.03 per share.

Each share of Series A preferred stock, Series B convertible preferred stock and Series C convertible preferred stock automatically converted into Shares on a one-for-12.0221 basis immediately prior to the closing of the IPO.

On and prior to the closing of the IPO, OrbiMed Advisors and GP VII, pursuant to their authority under the limited partnership agreement of OPI VII, as more particularly described in Item 6 below, caused OPI VII to purchase 500,000 Shares in the IPO, and OrbiMed Advisors and OrbiMed Genesis, pursuant to their authority under the limited partnership agreement of Genesis, as more particularly described in Item 6 below, caused Genesis to purchase 250,000 Shares in the IPO.

The source of funds for such purchases was the working capital of OPI VII and Genesis, respectively.

#### Item 4. Purpose of Transaction

This Statement relates to the acquisition of Shares by the Reporting Persons. The Shares acquired by the Reporting Persons were acquired for the purpose of making an investment in the Issuer and not with the intention of acquiring control of the Issuer's business on behalf of the Reporting Persons' respective advisory clients.

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 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'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 is based upon 31,853,698 Shares outstanding following the closing of the IPO, as set forth in the Issuer's Rule 424(b)(5) Prospectus filed with the SEC on September 13, 2024, without giving effect to an additional 1,530,000 Shares that may be issued and sold by the Issuer to the underwriters pursuant to the underwriters' option.

As of the date of this filing, OPI VII, a limited partnership organized under the laws of Delaware, holds 3,158,428 Shares, constituting approximately 9.9% of the issued and outstanding Shares. GP VII 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 GP VII, pursuant to the terms of the limited liability company agreement of GP VII. As a result, OrbiMed Advisors and GP VII 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. 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 OPI VII.

In addition, OrbiMed Advisors and GP VII, pursuant to their authority under the limited partnership agreement of OPI VII, caused OPI VII to enter into the agreements referred to in Item 6 below.

As of the date of this filing, Genesis, a limited partnership organized under the laws of the Cayman Islands, holds 653,787 Shares, constituting approximately 2.1% 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.

In addition, OrbiMed Advisors and OrbiMed Genesis, pursuant to their authority under the limited partnership agreement of Genesis, caused Genesis to enter into the agreements referred to in Item 6 below.

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

(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, GP VII 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, GP VII 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 3,158,428 Shares. GP VII, pursuant to its authority under the limited partnership agreement of OPI VII, may be considered to hold indirectly 3,158,428 Shares.

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 653,787 Shares. OrbiMed Genesis, pursuant to its authority under the limited partnership agreement of Genesis, may be considered to hold indirectly 653,787 Shares.

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, OrbiMed Advisors is the managing member of GP VII and OrbiMed Genesis, pursuant to the terms of the limited liability company agreements of GP VII and OrbiMed Genesis. Pursuant to these agreements and relationships, OrbiMed Advisors and GP VII have discretionary investment management authority with respect to the assets of OPI VII, and OrbiMed Genesis have discretionary investment management authority with respect to the assets of Genesis. Such authority includes the power of GP VII to vote and otherwise dispose of securities held by OPI VII and OrbiMed Genesis to vote and otherwise dispose of securities held by Gensis. The number of outstanding Shares attributable to OPI VII is 3,158,428 Shares, and the number of outstanding Shares attributable to Gensis is 653,787 Shares. OrbiMed Advisors, pursuant to its authority under the terms of the limited liability company agreements of GP VII and Genesis may also be considered to hold indirectly 3,812,215 Shares.

Carl Gordon ("<u>Gordon</u>"), a member of OrbiMed Advisors, is a member of the Board of Directors of the Issuer and, accordingly, OrbiMed Advisors and GP VII may have the ability to affect and influence control of the Issuer. From time to time, Gordon 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 GP VII, Gordon is obligated to transfer any securities issued under any such stock options or other awards, or the economic benefit thereof, to OrbiMed Advisors and GP VII who will in turn ensure that such securities or economic benefits are provided to OPI VII.

## Investors' Rights Agreement

In addition, OPI VII, Genesis, and certain other stockholders of the Issuer entered into a Second Amended and Restated Investors' Rights Agreement with the Issuer, dated as of August 2, 2204 (the "Investors' Rights Agreement"). Pursuant to the Investors' Rights Agreement and subject to the terms and conditions therein, the parties agreed that:

#### Demand Registration Rights

At any time beginning 180 days following the effective date of the registration statement of the IPO, the holders of at least 40% of the Issuer's registrable securities may request that the Issuer file a registration statement under the Securities Act of 1933, as amended (the "Securities Act") on a Form S-1 at the Issuer's expense, subject to certain exceptions, with an anticipated aggregate offering price, net of offering expenses, of not less than \$10 million, in which case the Issuer will be required to effect the registration as soon as practicable, and in any event within 60 days after the date of such registration request. The Issuer is not obligated to effect more than one of these registrations.

#### Form S-3 Registration Rights

At any time after the Issuer is qualified to file a registration statement on Form S-3 under the Securities Act, and subject to limitations and conditions specified in the Investors' Rights Agreement, holders of at least 20% of the registrable securities under the Investors' Rights Agreement may request that the Issuer prepare and file a registration statement on Form S-3 at the Issuer's expense covering the Shares of such holders having an anticipated aggregate offering price, net of offering expenses, of at least \$5 million, in which case the Issuer will be required to effect the registration as soon as practicable, and in any event within 45 days after receiving such request. The Issuer is not obligated to effect more than two of these registrations in any 12-month period.

## Piggyback Registration Rights

Whenever the Issuer proposes to file a registration statement under the Securities Act, other than with respect to certain excluded registrations, OPI VII and Gensis will each be entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of Shares included in the registration, to include the Shares held by them in the registration.

## Lock-Up Agreement

In addition, in connection with the IPO, OPI VII, Gensis, and Gordon each entered into a lock-up agreement (the "Lock-Up Agreement") with the Issuer's underwriters pursuant to which, among other things, OPI VII, Genesis, and Gordon each agreed not to, except in limited circumstances, directly or indirectly, from the date of the Lock-Up Agreement until 180 days after the date of the final prospectus supplement relating to the IPO (the "Lock-Up Period"): (i) 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 or any securities convertible into or exercisable or exchangeable for Shares; (ii) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the Shares or securities convertible into or exercisable or exchangeable for Shares, (iii) make any demand for, or exercise any right with respect to, the registration of any Shares or securities convertible into or exercisable or exchangeable for Shares, or (iv) publicly disclose the intention to do any of the foregoing.

After the Lock-Up Period expires, OPI VII's and Genesis's Shares will be eligible for sale in the public market, subject to any applicable limitations under Rule 144 under the Securities Act, and other applicable U.S. securities laws.

The foregoing description of the Investors' Rights Agreement and the Lock-Up Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Investors' Rights Agreement and the Lock-Up Agreement, which are filed as Exhibits 2 and 3, respectively, and incorporated herein by reference.

## Item 7. Material to Be Filed as Exhibits

Exhibit	Description
1.	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital GP VII LLC, and OrbiMed Genesis GP LLC.
2.	Second Amended and Restated Investors' Rights Agreement among the Issuer and certain of its stockholders, dated August 2, 2024 (incorporated by reference to Exhibit 4.1 to the Issuer's Registration Statement on Form S-1/A (File No. 333-281764) filed with the SEC on September 9, 2024).
3.	Form of Lock-Up Agreement (incorporated by reference to Exhibit D to Exhibit 1.1 to the Issuer's Registration Statement on Form S- 1/A (File No. 333-281764) filed with the SEC on September 9, 2024).

## 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: September 23, 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

# 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 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 on Schedule I attached.

# SCHEDULE III

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 on Schedule I attached.

# EXHIBIT INDEX

Exhibit	Description
1.	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital GP VII LLC, and OrbiMed Genesis GP LLC.
2.	Second Amended and Restated Investors' Rights Agreement among the Issuer and certain of its stockholders, dated August 2, 2024 (incorporated by reference to Exhibit 4.1 to the Issuer's Registration Statement on Form S-1/A (File No. 333-281764) filed with the SEC on September 9, 2024).
3.	Form of Lock-Up Agreement (incorporated by reference to Exhibit D to Exhibit 1.1 to the Issuer's Registration Statement on Form S- 1/A (File No. 333-281764) filed with the SEC on September 9, 2024).

## <u>Exhibit 1</u>

### JOINT FILING AGREEMENT

The undersigned hereby agree that the Statement on Schedule 13D, dated September 16, 2024, with respect to the common stock of MBX Biosciences, 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 Joint Filing 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 Joint Filing Agreement as of the 23rd day of September 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