UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1 **REGISTRATION STATEMENT**

UNDER THE SECURITIES ACT OF 1933

MBX Biosciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

2834

(Primary Standard Industrial Classification Code Number)

84-1882872 (I.R.S. Employer Identification No.)

MBX Biosciences, Inc. 11711 N. Meridian Street, Suite 300 Carmel, Indiana 46032 (317) 659-0200

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

P. Kent Hawryluk **President and Chief Executive Officer** MBX Biosciences, Inc. 11711 N. Meridian Street, Suite 300 Carmel, Indiana 46032 (317) 659-0200

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mitchell S. Bloom Edwin O'Connor **Daniel Hughes Goodwin Procter LLP** 100 Northern Avenue

company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Richard D. Truesdell, Jr. Yasin Keshvargar Davis Polk & Wardwell LLP 450 Lexington Avenue New York, New York 10017

Accelerated filer

Boston, Massachusetts 02210 (617) 570-1000	(212) 450-4000		
Approximate date of commencement of proposed sale to the public: As soc	on as practicable after the effective date of this registration statement.		
If any of the securities being registered on this Form are to be offered on a dela 1933 check the following box: \Box	ayed or continuous basis pursuant to Rule 415 under the Securities Act of		
If this Form is filed to register additional securities for an offering pursuant to list the Securities Act registration statement number of the earlier effective registration.	• • • • • • • • • • • • • • • • • • • •		
If this Form is a post-effective amendment filed pursuant to Rule 462(c) under registration statement number of the earlier effective registration statement for	,		
If this Form is a post-effective amendment filed pursuant to Rule 462(d) under registration statement number of the earlier effective registration statement for	,		
Indicate by check mark whether the registrant is a large accelerated filer, an accemerging growth company. See the definitions of "large accelerated filer," "acc			

Non-accelerated filer	\boxtimes	Smaller reporting company	\boxtimes
		Emerging growth company	\boxtimes
	mpany, indicate by check mark if the registrant has elected not to use the extended transaccounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box	sition period for complying with an	у
The Registration Stater amended.	nent shall become effective upon filing in accordance with Rule 462(b) promulgated	l under the Securities Act of 1933	3, as

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This Registration Statement is being filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act"), for the sole purpose of increasing the aggregate number of shares of common stock offered by MBX Biosciences, Inc. (the "Registrant") by 1,955,000 shares, 255,000 of which are subject to purchase upon exercise of the underwriters' option to purchase additional shares of the Registrant's common stock. The contents of the Registration Statement on Form S-1, as amended (File No. 333-281764), filed by the Registrant with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act, including all amendments and exhibits thereto (the "Prior Registration Statement"), which was declared effective by the Commission on September 12, 2024, are incorporated by reference into this Registration Statement.

The additional shares of common stock that are being registered for issuance and sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in Exhibit 107 of the Prior Registration Statement.

The required opinion and consents are listed on an Exhibit Index attached hereto and filed herewith or incorporated by reference herein.

EXHIBIT INDEX

Exhibit No.	Exhibit Index
5.1	Opinion of Goodwin Procter LLP
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney
107	Filing Fee Table

^{*} Previously included on the signature page to the Prior Registration Statement, originally filed with the Securities and Exchange Commission on August 23, 2024 and incorporated by reference herein.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Carmel, Indiana, on the 12th day of September, 2024.

MBX Biosciences, Inc.

By: /s/ P. Kent Hawryluk

P. Kent Hawryluk

President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in their capacities and on the date indicated.

Signature	Title
/s/ P. Kent Hawryluk P. Kent Hawryluk	President, Chief Executive Officer and Director (Principal Executive Officer)
/s/ Richard Bartram Richard Bartram	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
* Tiba Aynechi	Director
* James M. Cornelius	Director
* Carl Gordon	Director
* Patrick Heron	Director
* Edward T. Mathers	Director
* Ora Pescovitz	Director
* Steven Ryder	Director
*By: /s/ P. Kent Hawryluk P. Kent Hawryluk Attorney-in-Fact	



Goodwin Procter LLP 100 Northern Avenue Boston, MA 02210

goodwinlaw.com +1 617 570 1000

September 12, 2024

MBX Biosciences, Inc. 11711 N. Meridian Street, Suite 300 Carmel. IN 46032

Re: <u>Securities Registered under Registration Statement on Form S-1</u>

We have acted as counsel to you in connection with your filing of (i) a Registration Statement on Form S-1 (File No. 333-281764) (as amended or supplemented, the "Initial Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), and (ii) a second Registration Statement on Form S-1 filed pursuant to Rule 462(b) promulgated under the Securities Act (the "462(b) Registration Statement," and together with the Initial Registration Statement, the "Registration Statement"). This opinion letter is being furnished to you in connection with your filing of the 462(b) Registration Statement relating to the registration of the offering by MBX Biosciences, Inc., a Delaware corporation (the "Company"), of up to 1,955,000 shares (the "Shares") of the Company's Common Stock, \$0.0001 par value per share, including Shares purchasable by the underwriters upon their exercise of an over-allotment option granted to the underwriters by the Company. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and such underwriters (the "Underwriting Agreement").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Company Shares have been duly authorized and, when delivered and paid for in accordance with the terms of the Underwriting Agreement, will be validly issued, fully paid and non-assessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 *Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

MBX Biosciences, Inc. September 12, 2024 Page 2

Very truly yours,

/s/ Goodwin Procter LLP GOODWIN PROCTER LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption "Experts" and to the incorporation by reference of our report dated March 22, 2024 (except for Note 17 as to which the date is September 9, 2024), with respect to the financial statements of MBX Biosciences, Inc. included in Amendment No. 2 to the Registration Statement (Form S-1 No. 333-281764) and related Prospectus of MBX Biosciences, Inc. for the registration of its common stock.

/s/ Ernst & Young LLP

Indianapolis, Indiana September 12, 2024

Calculation of Filing Fee Table Form S-1 (Form Type)

MBX Biosciences, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered(1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price(1)(2)	Fee Rate	Amount of Registration Fee
Fees to								
Be		Common Stock,						
Paid	Equity	\$0.0001 par value per share	457(a)	1,955,000	\$16.00	\$31,280,000.00	0.00014760	\$4,616.93
	Total Offering Amounts				\$31,280,000.00		\$4,616.93	
	Total Fees Previously Paid							_
	Total Fee Offsets							_
	Net Fee Due							\$4,616.93(3)

⁽¹⁾ Represents only the additional number of shares being registered and includes 255,000 shares of common stock that the underwriters have the option to purchase. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1 (File No. 333-281764), as amended (the "Prior Registration Statement").

⁽²⁾ Estimated solely for the purpose of computing the registration fee in accordance with Rule 457(a) under the Securities Act of 1933, as amended (the "Securities Act").

³⁾ The registrant previously registered securities at an aggregate offering price not to exceed \$156,400,000, which was declared effective by the Securities and Exchange Commission on September 12, 2024. In accordance with Rule 462(b) under the Securities Act, an additional amount of securities having a proposed maximum aggregate offering price of \$16.00 per share is hereby registered, which includes shares issuable upon the exercise of the underwriters' option to purchase additional shares.