



DIVISION OF
CORPORATION FINANCE

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

August 30, 2024

P. Kent Hawryluk
President and Chief Executive Officer
MBX Biosciences, Inc.
11711 N. Meridian Street, Suite 300
Carmel, Indiana 46032

Re: MBX Biosciences, Inc.
Registration Statement on Form S-1
Filed August 23, 2024
File No. 333-281764

Dear P. Kent Hawryluk:

We have reviewed your registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this letter, we may have additional comments.

Registration Statement on Form S-1

Prospectus summary

MBX 2109: Potential treatment for chronic hypoparathyroidism, page 4

1. Please revise the second paragraph of this section discussing treatments for HP to reflect your disclosure elsewhere in the prospectus that Yorvipath has been approved by the FDA for the treatment of HP. Please similarly revise your risk factor discussion of Yorvipath and the left column of the graphic on page 132, as needed.

Our company and team, page 6

2. Please limit the discussion of your existing stockholders to those stockholders who appear in your Principal Stockholders section.

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We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Christine Torney at 202-551-3652 or Angela Connell at 202-551-3426 if you have questions regarding comments on the financial statements and related matters. Please contact Jimmy McNamara at 202-551-7349 or Alan Campbell at 202-551-4224 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Edwin O'Connor