VIA EDGAR

J.P. Morgan Securities LLC 383 Madison Avenue New York, New York 10179

Jefferies LLC 520 Madison Avenue New York, New York 10022

September 10, 2024

United States Securities and Exchange Commission Division of Corporation Finance Office of Life Sciences 100 F. Street, N.E. Washington, D.C. 20549

Attention: Christine Torney, Angela Connell, Jimmy McNamara, Alan Campbell

Re: MBX Biosciences, Inc. Acceleration Request for Registration Statement on Form S-1 File No. 333-281764

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Act"), we, as representatives of the several underwriters, hereby join in the request of MBX Biosciences, Inc. (the "Company") for acceleration of the effective date of the above-referenced Registration Statement on Form S-1, as amended, so that it becomes effective at 4:00 p.m. Eastern time on September 12, 2024, or as soon thereafter as practicable, or at such other time as the Company or its outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective.

Pursuant to Rule 460 under the Act, we, as representatives of the several underwriters, wish to advise you that there will be distributed to each underwriter or dealer, who is reasonably anticipated to participate in the distribution of the security, as many copies of the preliminary prospectus as appears to be reasonable to secure adequate distribution of the preliminary prospectus.

We, the undersigned, as representatives of the several underwriters, have complied and will comply, and we have been informed by the participating underwriters that they have complied and will comply, with the requirements of Rule 15c2-8 under the Securities Exchange Act of 1934, as amended.

Very truly yours,

J.P. MORGAN SECURITIES LLC JEFFERIES LLC

As representatives of the several underwriters listed in Schedule 1 to the Underwriting Agreement

J.P. MORGAN SECURITIES LLC

By: /s/ David Ke Name: David Ke Title: Managing Director

JEFFERIES LLC

By: /s/ Matthew Kim Name: Matthew Kim Title: Managing Director

[Signature Page to Underwriters' Acceleration Request]