VIA EDGAR

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

Dear Ladies and Gentlemen,

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Act"), MBX Biosciences, Inc. (the "Company") hereby requests that the effective date of the above-referenced registration statement (the "Registration Statement") be accelerated to September 12, 2024 at 4:00 p.m. Eastern Time, or as soon thereafter as practicable, unless we or our outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective at some other time. In making this acceleration request, the Company acknowledges that it is aware of its responsibilities under the Act.

Once the Registration Statement is effective, please orally confirm the event with our counsel, Goodwin Procter LLP, by calling Edwin M. O'Connor at (212) 813-8853.

If you have any questions regarding this request, please contact Edwin M. O'Connor of Goodwin Procter LLP at (212) 813-8853.

Sincerely,

MBX BIOSCIENCES, INC.

/s/ P. Kent Hawryluk

P. Kent Hawryluk Chief Executive Officer

cc: Richard Bartram, MBX Biosciences, Inc. Mitchell S. Bloom, Esq., Goodwin Procter LLP Edwin M. O'Connor, Esq., Goodwin Procter LLP Daniel Hughes, Esq., Goodwin Procter LLP