



DIVISION OF
CORPORATION FINANCE

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

September 24, 2025

Walter Klemp
Chief Executive Officer
Moleculin Biotech, Inc.
5300 Memorial Drive, Suite 950
Houston, TX 77007

Re: Moleculin Biotech, Inc.
Registration Statement on Form S-3
Filed September 19, 2025
File No. 333-290418

Dear Walter Klemp:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Jessica Dickerson at 202-551-8013 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Cavas S. Pavri, Esq.