



DIVISION OF
CORPORATION FINANCE

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

February 9, 2024

Walter V. Klemp
Chief Executive Officer and Chairman
Moleculin Biotech, Inc.
5300 Memorial Drive, Suite 950
Houston, Texas 77007

Re: Moleculin Biotech, Inc.
Registration Statement on Form S-1
Filed February 2, 2024
File No. 333-276851

Dear Walter V. 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 Chris Edwards at 202-551-6761 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Cavas S. Pavri