

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

July 19, 2018

Walter Klemp Chief Executive Officer Moleculin Biotech, Inc. 2575 West Bellfort, Suite 333 Houston, TX 77054

Re: Moleculin Biotech, Inc.
Registration Statement on Form S-1
Filed July 12, 2018
File No. 333-226146

Dear Mr. 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 Christine Westbrook at 202-551-5019 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Cavas S. Pavri, Esq.