

September 1, 2020

David L. Lucchino
President and Chief Executive Officer
Frequency Therapeutics, Inc.
19 Presidential Way, 2nd Floor
Woburn, MA 01801

Therapeutics, Inc.
Statement on Form S-1
2020

Re: Frequency
Registration
Filed August 28,
File No. 333-248474

Dear Mr. Lucchino:

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 Tim Buchmiller at (202) 551-3635 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc:

John Chory, Esq.