

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

DIVISION OF CORPORATION FINANCE

September 11, 2019

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

> Re: Frequency Therapeutics, Inc. Draft Registration Statement on Form S-1 Exhibit Nos. 10.10, 10.11 and 10.12 Submitted August 22, 2019 File No. 377-02740

Dear Mr. Lucchino:

We have concluded our assessment of your redacted exhibits for compliance with applicable form requirements and will process your supplemental response and related materials in accordance with your request.

Sincerely,

Division of Corporation Finance