

FOIA CONFIDENTIAL TREATMENT REQUEST UNDER 17 C.F.R. §200.83

The entity requesting confidential treatment is:

Frequency Therapeutics, Inc.
19 Presidential Way, 2nd Floor
Woburn, MA 01801

FIRM / AFFILIATE OFFICES

Beijing	Moscow
Boston	Munich
Brussels	New York
Century City	Orange County
Chicago	Paris
Dubai	Riyadh
Düsseldorf	San Diego
Frankfurt	San Francisco
Hamburg	Seoul
Hong Kong	Shanghai
Houston	Silicon Valley
London	Singapore
Los Angeles	Tokyo
Madrid	Washington, D.C.
Milan	

Certain confidential information in this letter has been omitted and provided separately to the Securities and Exchange Commission. Confidential treatment has been requested by Frequency Therapeutics, Inc. with respect to the omitted portions, which are identified in this letter by the mark “[*].”**

September 13, 2019

VIA EDGAR AND HAND DELIVERY

CONFIDENTIAL

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Mail Stop 4720
Washington, D.C. 20549

Attention: Donald Field
Dietrich King
Andi Carpenter
Sharon Blume

Re: Frequency Therapeutics, Inc. | Anticipated Price Range and Share-Based Compensation | Registration Statement on Form S-1 (File No. 333-233652)

Dear Mr. Field:

On behalf of Frequency Therapeutics, Inc. (the “*Company*”), we submit this letter to the staff (the “*Staff*”) of the Division of Corporation Finance of the Securities and Exchange Commission (the “*Commission*”). The Company confidentially submitted a draft of the above-referenced Registration Statement (the “*Registration Statement*”) to the Commission on July 19, 2019, resubmitted the Registration Statement to the Commission on August 22, 2019, and subsequently filed the Registration Statement with the Commission on September 6, 2019. The purpose of this letter is to respond to an outstanding comment relating to share-based compensation that was provided to the Company in a letter from the Staff dated August 13, 2019. Because of the commercially sensitive nature of the information contained herein, this submission is accompanied by the Company’s request for confidential treatment of selected portions of this letter pursuant to Rule 83 of the Commission’s Rules on Information and Requests, 17 C.F.R. §200.83. A redacted letter has been filed on EDGAR, omitting the confidential information contained in the Letter.

For the convenience of the Staff, we are providing to the Staff copies of this letter by hand delivery. In this letter, we have recited the prior comment from the Staff in italicized, bold type and have followed the comment with the Company’s response.

3. ***Once you have an estimated offering price or range, please explain to us the reasons for any differences between the recent valuations of your common stock and the estimated offering price. This information will help facilitate our review of your accounting for equity issuance including stock compensation and beneficial conversion features.***

Estimated Preliminary IPO Price Range

The Company supplementally advises the Staff that, while not yet reflected in the Registration Statement, based on discussions with the Company’s board of directors (the “*Board*”) and reflecting input from the lead underwriters (the “*Underwriters*”) of the Company’s proposed initial public offering of its common stock (“*IPO*”), if the Company were to commence marketing of the IPO today, the Company presently anticipates that the estimated price range would be approximately \$[***] per share to \$[***] per share (the “*Preliminary IPO Price Range*”), with a midpoint of approximately \$[***] per share (the “*Preliminary Assumed IPO Price*”), before giving effect to an anticipated reverse stock split. The Company advises the Staff that the final range to be included in a pre-effective amendment to the Registration Statement will include a price range of no more than \$2.00, if the maximum price is \$10.00 per share or less, or 20% of the high end of the range, if the maximum price is greater than \$10.00 per share, unless otherwise approved by the Staff.

The Company’s final range to be included in a pre-effective amendment to the Registration Statement remains under discussion between the Company and the Underwriters, and a bona fide price range will be included in an amendment to the Registration Statement prior to any distribution of the preliminary prospectus in connection with the Company’s road show.

Summary of Recent Option Grants and Common Stock Valuation

The estimated fair value of the Company’s common stock has been determined by the Board as of the date of each stock option grant or restricted stock award (“*RSA*”), with input from management after considering third-party valuations of the common stock, as well as the Board’s assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent third-party valuation through the date of the grant. This valuation methodology has been applied as there has been no public market to date for the common stock of the Company. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants’ Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, and were prepared using a hybrid method, which is a probability-weighted expected return method (“*PWERM*”) where the equity value in one or more of the scenarios is calculated using an option pricing method (“*OPM*”).

**CONFIDENTIAL TREATMENT HAS BEEN REQUESTED BY
FREQUENCY THERAPEUTICS, INC.**

The Company's most recent third-party valuations, which were used, in part, by the Board to determine the fair value of the Company's common stock as of the grant date of each option and/or restricted stock award, considered a combination of the following three future-event scenarios: an IPO scenario, a sale scenario, and a liquidation scenario. The equity value of the Company in the IPO scenario and the sale scenario was determined using market approaches. The IPO scenario assumed that all shares of preferred stock would convert into shares of common stock and would no longer have the liquidation preferences and preferential rights attributable to the preferred stock as compared to the common stock prior to the IPO. Each valuation probability-weighted the future-event scenarios based on the Company's assessment of its development pipeline and market conditions at that time. For the IPO scenario and the sale scenario, the Company then applied a discount for lack of marketability ("*DLOM*"), each determined by a put option analysis that considered the timing of each future-event scenario.

Since July 1, 2018, equity awards were granted as follows at the exercise or sale price that the Board determined to be the fair value per share of the Company's common stock on that date:

Grant Date	Type of award	Number of Shares Subject to Award Granted	Per Share Exercise Price of Options or Sale Price for RSAs	Fair Value per Share of Common Stock on Grant Date
December 5, 2018	Options	315,000	\$ 0.26	\$ 0.26
December 5, 2018	RSAs	50,000	\$ 0.26	\$ 0.26
April 17, 2019	Options	15,995,329	\$ 0.50	\$ 0.50
May 20, 2019	Options	1,000,000	\$ 0.50	\$ 0.50
August 2, 2019	Options	1,215,000	\$ 1.11	\$ 1.11
August 18, 2019	Options	1,250,000	\$ 1.11	\$ 1.11
September 11, 2019	Options	850,000	\$ 1.58	\$ 1.58

The Board's determination of each fair value was based, in part, on the results of a third-party valuation of the Company's common stock performed on October 31, 2018 (the "*October 31, 2018 Valuation*"), March 31, 2019 (the "*March 31, 2019 Valuation*"), July 19, 2019 (the "*July 19, 2019 Valuation*"), and September 6, 2019 (the "*September 6, 2019 Valuation*").

December 5, 2018 Option and Restricted Stock Grants. The Board determined that the fair value of the Company's common stock was \$0.26 per share as of December 5, 2018 based on input from management, the objective and subjective factors that it believed were relevant and the results of the October 31, 2018 Valuation. The October 31, 2018 Valuation was prepared taking into account the sale of shares of the Company's Series B preferred stock to new and existing investors on October 17, 2018, at a price of \$0.92 per share for total consideration of \$40.0 million. In the October 31, 2018 Valuation, the independent third-party valuation specialist used a hybrid back-solve method considering three scenarios in a PWERM framework and using the OPM to allocate value in one of the scenarios. The scenarios

**CONFIDENTIAL TREATMENT HAS BEEN REQUESTED BY
FREQUENCY THERAPEUTICS, INC.**

LATHAM & WATKINS LLP

included: a trade-sale scenario predicated on the Series B financing that transpired prior to the valuation date, an IPO scenario with reference to the arms' length capital transaction, and a liquidation scenario. Under the hybrid method, the per share value calculated under the three scenarios are weighted based on expected exit outcomes and the quality of the information specific to each allocation methodology to arrive at a final estimated fair value per share of the common stock before a DLOM is applied. The October 31, 2018 Valuation (i) assigned a 75% probability of occurrence to the trade-sale scenario, with a 71% volatility rate and a 1.9-year weighted average estimated term applied within the OPM, then reflected a DLOM of 35%; and (ii) assigned a 5% probability of occurrence to the IPO scenario, with a 30% discount rate and a 1.0-year estimated term to an IPO event, then reflected a DLOM of 15%. The liquidation scenario was weighted at 20% with no value allocated to the common stock for this scenario.

April 17, 2019 and May 20, 2019 Option Grants. The Board determined that the fair value of the Company's common stock was \$0.50 per share as of April 17, 2019 and May 20, 2019 based on input from management, the objective and subjective factors that it believed were relevant, and the results of the March 31, 2019 Valuation. In the March 31, 2019 Valuation, the independent third-party valuation specialist used a hybrid back-solve method considering three scenarios in a PWERM framework and using the OPM to allocate value in one of the scenarios. The scenarios included: a trade-sale scenario predicated on a projected future M&A transaction, an IPO scenario with reference to guideline IPO transactions, and a liquidation scenario. Under the hybrid method, the per share value calculated under the three scenarios are weighted based on expected exit outcomes and the quality of the information specific to each allocation methodology to arrive at a final estimated fair value per share of the common stock before a DLOM is applied. The March 31, 2019 Valuation (i) assigned a 70% probability of occurrence to the trade-sale scenario, with a 79% volatility rate and a 1.9-year weighted average estimated term applied within the OPM, then reflected a DLOM of 30%; and (ii) assigned a 20% probability of occurrence to the IPO scenario, with a 30% discount rate and a 0.7-year estimated term to an IPO event, then reflected a DLOM of 12.5%. The liquidation scenario was weighted at 10% with no value allocated to the common stock for this scenario. The March 31, 2019 Valuation also took into consideration clinical data from the unblinding of the Company's Phase 1 clinical trial for its primary product candidate, FX-322, in late January 2019 as well as the signing of a letter of intent on March 28, 2019 with Astellas Pharma, Inc. ("*Astellas*") for a corporate collaboration centered around FX-322. Further, it also reflects that the Company was actively seeking a lead investor for its Series C preferred stock crossover financing, did not execute a term sheet until May 21, 2019, and did not fill out the financing syndicate until some time thereafter. The closing of this crossover financing was contingent on the closing of the corporate partnership with Astellas.

August 2, 2019 and August 18, 2019 Option Grants. The Board determined that the fair value of the Company's common stock was \$1.11 per share as of August 2, 2019 and August 18, 2019 based on input from management, the objective and subjective factors that it believed were relevant and the results of the July 19, 2019 Valuation. The July 19, 2019 Valuation was prepared taking into account the sale of shares of the Company's Series C preferred stock to new and existing investors on July 17, 2019 at a price of \$1.57 per share for total consideration of \$62.0 million. In the July 19, 2019 Valuation, the independent third-party valuation specialist used a hybrid back-solve method considering two scenarios in a PWERM framework and using the OPM to allocate value in one of the scenarios. The scenarios included: a trade-sale scenario predicated on the Company's Series C financing and an IPO scenario with reference to guideline IPO transactions. Under the hybrid method, the per share value calculated under the two scenarios are weighted based on expected exit outcomes and the quality of the information specific to each allocation methodology to arrive at a final estimated fair value per share of the common stock before a

**CONFIDENTIAL TREATMENT HAS BEEN REQUESTED BY
FREQUENCY THERAPEUTICS, INC.**

LATHAM & WATKINS LLP

DLOM is applied. The July 19, 2019 Valuation (i) assigned a 40% probability of occurrence to the trade-sale scenario, with a 79% volatility rate and a 1.5-year weighted average estimated term applied within the OPM, then reflected a DLOM of 30%; and (ii) assigned a 60% probability of occurrence to the IPO scenario, with a 25% discount rate and a 0.2-year estimated term to an IPO event, then reflected a DLOM of 10%. The July 19, 2019 Valuation also took into consideration the execution of the corporate collaboration with Astellas on July 17, 2019 and the confidential submission of the Registration Statement on July 19, 2019.

September 11, 2019 Option Grants. The Board determined that the fair value of the Company's common stock was \$1.58 per share as of September 11, 2019 based on input from management, the objective and subjective factors that it believed were relevant and the results of the September 6, 2019 Valuation. The September 6, 2019 Valuation was prepared taking into account the sale of shares of the Company's Series C preferred stock to new and existing investors on July 17, 2019 at a price of \$1.57 per share for total consideration of \$62.0 million. In the September 6, 2019 Valuation, the independent third-party valuation specialist used a hybrid back-solve method considering two scenarios in a PWERM framework and using the OPM to allocate value in one of the scenarios. The scenarios included: a trade-sale scenario predicated on the Company's Series C financing and an IPO scenario with reference to guideline IPO transactions. Under the hybrid method, the per share value calculated under the two scenarios are weighted based on expected exit outcomes and the quality of the information specific to each allocation methodology to arrive at a final estimated fair value per share of the common stock before a DLOM is applied. The September 6, 2019 Valuation (i) assigned a 15% probability of occurrence to the trade-sale scenario, with a 79% volatility rate and a 1.5-year weighted average estimated term applied within the OPM, then reflected a DLOM of 30%; and (ii) assigned a 85% probability of occurrence to the IPO scenario, with a 25% discount rate and a 0.24-year estimated term to an IPO event, then reflected a DLOM of 2.5%. The September 6, 2019 Valuation also took into consideration the execution of the corporate collaboration with Astellas on July 17, 2019 and the public filing of the Registration Statement on September 6, 2019.

Comparison of the Most Recent Valuations and the Preliminary IPO Price Range

As is typical in an initial public offering, the Preliminary IPO Price Range for the IPO was not derived using a formal determination of estimated fair value, but was determined based on discussions between the Company and the Underwriters. Prior to September 11, 2019, the Company and the Underwriters had not had any specific discussions regarding the Preliminary IPO Price Range. Among the factors that the Company considered in setting the Preliminary IPO Price Range were the following:

- an analysis of the typical valuation ranges seen in recent initial public offerings for clinical-stage biopharmaceutical companies;
- the general condition of the securities markets and the recent market prices of, and the demand for, publicly traded common stock of generally comparable companies;
- the recent performance of U.S. initial public offerings of generally comparable companies;
- estimates of business potential and earnings prospects for the Company and the industry in which it operates;

**CONFIDENTIAL TREATMENT HAS BEEN REQUESTED BY
FREQUENCY THERAPEUTICS, INC.**

LATHAM & WATKINS LLP

- the Company's financial position and prospects;
- an assumption that there would be a receptive public trading market for pre-commercial, clinical-stage biopharmaceutical companies such as the Company; and
- an assumption that there would be sufficient demand for the Company's common stock to support an offering of the size contemplated by the Company.

The Company respectfully submits that the difference between the prior valuations and the Preliminary Assumed IPO Price is primarily attributable to the following factors:

- The closing of the Company's Series C preferred stock financing and the entry into the collaboration agreement by the Company with Astellas in July 2019, which strengthened the Company's balance sheet and is expected to provide additional support for the Company's development of FX-322.
- The Preliminary IPO Price Range is based only upon a scenario in which the Company completes the IPO and is not probability weighted, in contrast to the Company's prior valuations of common stock, which considered other potential exit scenarios, which would have resulted in a lower value of its common stock than the IPO. If the Company had applied a weighting of 100% to the IPO scenario, the fair value of the Company's common stock in the September 6, 2019 Valuation would have been \$1.79 per share (before giving effect to any DLOM).
- The Preliminary IPO Price Range assumes that the IPO has occurred and that a public market for the Company's common stock has been created, and, therefore, excludes any DLOM of the Company's common stock. As described above, a DLOM was applied in the third-party valuation reports.
- The Company's preferred stock currently has substantial economic rights and preferences over its common stock. Upon the closing of the IPO, all outstanding preferred stock will convert into common stock, thus eliminating the superior economic rights and preferences of the preferred stock as compared to the common stock.
- The successful completion of the IPO would strengthen the Company's balance sheet, provide access to additional public equity going forward, increase the Company's strategic flexibility and provide enhanced operational flexibility to potentially obtain regulatory approval for and commercialize its product candidates.
- Input received from the Underwriters, including further discussions that took place on or following September 11, 2019 with senior management of the Company and its Board, incorporating feedback from qualified potential investors obtained during testing-the-waters meetings in July 2019.
- Progress in the Company's business with the commencement of screening of patients for the Company's Phase 2a clinical trial of its lead product candidate, FX-322, for the treatment of sensorineural hearing loss.

**CONFIDENTIAL TREATMENT HAS BEEN REQUESTED BY
FREQUENCY THERAPEUTICS, INC.**

LATHAM & WATKINS LLP

In conclusion, the Company respectfully submits that the difference between the recent valuations of its common stock used in connection with the option grants for financial reporting purposes and the Preliminary Assumed IPO Price (i.e., the midpoint of the Preliminary IPO Price Range) is reasonable in light of all of the considerations outlined above. In addition, the Company will continue to update its disclosure for all equity-related transactions, if any, through the effective date of the Registration Statement. Based on the foregoing, the Company respectfully seeks confirmation that the Staff has no further comments with respect to the matters discussed in this letter.

The Company respectfully requests that the information contained in this letter be treated as confidential information and that the Commission provide timely notice to David L. Lucchino, Chief Executive Officer, Frequency Therapeutics, Inc., 19 Presidential Way, 2nd Floor Woburn, MA 01801, telephone (866) 389-1970, before it permits any disclosure of the underlined and highlighted information contained in this letter.

Please direct any questions or comments regarding this letter or the Registration Statement to me at (212) 906-2916. Thank you for your assistance.

Sincerely,

/s/ Nathan Ajiashvili

Nathan Ajiashvili
of LATHAM & WATKINS LLP

Enclosures

cc: (via e-mail)

David L. Lucchino, Frequency Therapeutics, Inc.

Michael D. Bookman, Frequency Therapeutics, Inc.

Arthur D. Robinson, Simpson Thacher & Bartlett LLP

<p>CONFIDENTIAL TREATMENT HAS BEEN REQUESTED BY FREQUENCY THERAPEUTICS, INC.</p>
