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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): July 17, 2020

FREQUENCY THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-39062**	**47-2324450**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

19 Presidential Way, 2nd Floor
Woburn, MA 01801
(Address of principal executive offices) (Zip Code)

(866) 389-1970
Registrant's telephone number, including area code

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value per share	**FREQ**	**The Nasdaq Global Select Market**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 1.01. Entry into a Material Definitive Agreement

On July 17, 2020, Frequency Therapeutics, Inc. (the "Company") entered into a Securities Purchase Agreement (the "Purchase Agreement") with the purchasers named therein (the "Investors"), including affiliates of certain members of the board of directors of the Company.

Pursuant to the Purchase Agreement, the Company agreed to sell an aggregate of 2,350,108 shares of its common stock (the "Shares"), par value $0.001 per share (the "Common Stock"), at a purchase price equal to $18.00 per share to the Investors for aggregate gross proceeds of approximately $42.3 million (collectively, the "Private Placement"). The closing of the Private Placement occurred on July 20, 2020.

On July 17, 2020, in connection with the Purchase Agreement, the Company entered into a Registration Rights Agreement (the "Registration Rights Agreement") with the Investors. Pursuant to the Registration Rights Agreement, the Company agreed to prepare and file a registration statement with the Securities and Exchange Commission (the "SEC") within 60 days after the closing of the Private Placement (the "Initial Filing Date") for purposes of registering the resale of the Shares. The Company agreed to use its reasonable best efforts to cause this registration statement to be declared effective by the SEC within 60 days after the Initial Filing Date.

The Company has also agreed, among other things, to indemnify the Investors, their officers, directors, managers, employees, agents and any person who controls any Investor under the registration statement from certain liabilities and to pay all fees and expenses (excluding any underwriting discounts and commissions) incident to the Company's obligations under the Registration Rights Agreement.

The Private Placement is exempt from registration pursuant to Section 4(a)(2) of the Securities Act and Regulation D promulgated thereunder, as a transaction by an issuer not involving a public offering. The Investors have acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends have been affixed to the securities issued in this transaction.

The foregoing summaries of the Purchase Agreement and Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the Purchase Agreement and Registration Rights Agreement, which are filed as Exhibits 10.1 and 10.2, respectively, to this Current Report on Form 8-K.

Item 3.02 Unregistered Sales of Equity Securities.

The information contained in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 3.02.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
10.1#	Securities Purchase Agreement, dated July 17, 2020, by and among Frequency Therapeutics, Inc. and the Investors named therein.
10.2#	Registration Rights Agreement, dated July 17, 2020, by and among Frequency Therapeutics, Inc. and the Investors named therein.

The representations and warranties contained in this agreement were made only for purposes of the transactions contemplated by the agreement as of specific dates and may have been qualified by certain disclosures between the parties and a contractual standard of materiality different from those generally applicable under securities laws, among other limitations. The representations and warranties were made for purposes of allocating contractual risk between the parties to the agreement and should not be relied upon as a disclosure of factual information relating to the Company, the Investors or the transactions described in this Current Report on Form 8-K.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

FREQUENCY THERAPEUTICS, INC.

Date: July 21, 2020

By: /s/ Michael D. Bookman
Name: Michael D. Bookman
Title: Deputy General Counsel

Execution Version

SECURITIES PURCHASE AGREEMENT

SECURITIES PURCHASE AGREEMENT (the "**Agreement**"), dated as of July 17, 2020, by and among Frequency Therapeutics, Inc., a Delaware corporation, with headquarters located at 19 Presidential Way, 2nd Floor, Woburn, MA 01801 (the "**Company**"), and the investors listed on the Schedule A attached hereto (individually, a "**Buyer**" and together, the "**Buyers**").

WHEREAS:

A. The Company and the Buyers are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Rule 506(b) of Regulation D ("**Regulation D**") as promulgated by the United States Securities and Exchange Commission (the "**SEC**") under the Securities Act of 1933, as amended (the "**1933 Act**");

B. The Buyers, severally, and not jointly, wish to purchase from the Company, and the Company wishes to sell to the Buyers, upon the terms and conditions stated in this Agreement, the number of shares (the "**Shares**" or the "**Securities**") of the Company's common stock, par value $0.001 per share (the "**Common Stock**") set forth on Schedule A hereto;

C. The Company has engaged Cowen and Company, LLC to act as placement agent (the "**Placement Agent**") for the offering of the Shares on a "best efforts" basis; and

D. Contemporaneously with the execution and delivery of this Agreement, the parties hereto are executing and delivering a Registration Rights Agreement, substantially in the form attached as Exhibit A (as the same may be amended, restated, modified or supplemented and in effect from time to time, the "**Registration Rights Agreement**"), pursuant to which the Company has agreed to provide certain registration rights in respect of the Shares under the 1933 Act and the rules and regulations promulgated thereunder, and applicable state securities laws.

NOW THEREFORE, the Company and the Buyers hereby agree as follows:

1. PURCHASE AND SALE OF SHARES.

a. Purchase of the Shares. Subject to the satisfaction (or waiver) of the conditions set forth in Sections 5 and 6 below, on the Closing Date (as defined in Section 1.b), the Company shall issue and sell to each Buyer, and each Buyer severally and not jointly agrees to purchase from the Company, the number of Shares set forth opposite such Buyer's name under the heading "Number of Shares To Be Purchased" on Schedule A attached hereto (the "**Closing**"). The purchase price (the "**Purchase Price**") of the Shares at the Closing shall be equal to $18.00 per Share.

b. The Closing Date. The date and time of the Closing (the "**Closing Date**") shall be 9:00 a.m., New York City time, on July 20, 2020 subject to the satisfaction (or waiver) of all of the conditions to the Closing set forth in Sections 5 and 6 (or such later or earlier date as is mutually agreed to in writing by the Company and the Required Buyers). The Closing shall occur on the Closing Date at the offices of Latham & Watkins LLP ("**Latham**"), 200 Clarendon Street, 27th Floor, Boston, Massachusetts 02116 or at such other place as the Company and the Buyers may collectively designate. For purposes of this Agreement, "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in the City of New York are authorized or required by law to remain closed.

c. Form of Payment. On the Closing Date, (i) each Buyer shall pay the applicable Purchase Price to the Company for the Shares to be issued and sold to such Buyer on the Closing Date, by wire transfer of immediately available funds in accordance with the Company's written wire instructions, and (ii) the Company shall deliver to each Buyer a copy of the irrevocable instructions (the "**Transfer Instructions**") to Computershare Limited (the "**Transfer Agent**") instructing the Transfer Agent to issue to such Buyer or its designee(s), in book-entry form, a number of Shares equal to the aggregate number of Shares that such Buyer is purchasing on the Closing Date.

2. BUYER'S REPRESENTATIONS AND WARRANTIES.

Each Buyer represents and warrants, severally and not jointly, as of the date of this Agreement and the Closing Date, with respect to only itself, to the Company and the Placement Agent that:

a. Investment Purpose. Each Buyer understands that the Securities are "restricted securities" and have not been registered under the 1933 Act or any applicable state securities law and each such Buyer is acquiring the Securities hereunder for its own account and not with a view towards, or for resale in connection with, the public sale or distribution, except pursuant to sales registered under, or exempted from, the registration requirements of the 1933 Act; *provided*, *however*, that by making the representations herein, such Buyer does not agree to hold any of the Securities for any minimum or other specific term and reserves the right to assign, transfer or otherwise dispose of any of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act.

b. Accredited Investor Status. Such Buyer is an "accredited investor" as that term is defined in Rule 501 of Regulation D.

c. Reliance on Exemptions. Such Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of the United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Buyer's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Buyer set forth herein in order to determine the availability of such exemptions.

d. Information. Such Buyer acknowledges that it has had the opportunity to review the SEC Documents (as defined below) and such Buyer and its advisors, if any, have been furnished with materials relating to the business, finances and operations of the Company and materials relating to the offer and sale of the Securities sufficient in its view to enable it to evaluate its investment. Such Buyer and its advisors, if any, have been afforded the opportunity to ask questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities. Neither such inquiries nor any other due diligence investigations conducted by such Buyer or its advisors, if any, or its representatives shall modify,

amend or affect such Buyer's right to rely on the Company's representations and warranties contained in Section 3 below. The Buyer has received no representation or warranties from the Company, its employees, agents, or attorneys in making this investment decision other than as set forth in Section 3 below.

e. General Solicitation. Such Buyer is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general advertisement.

f. Experience of Such Buyer. Such Buyer, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Buyer is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

g. Independent Investment Decision. Such Buyer has independently evaluated the merits of its decision to purchase Shares pursuant to the Transaction Documents (as defined below) to which it is a party, and such Buyer confirms that it has not relied on the advice of any other Buyer's business and/or legal counsel in making such decision. Such Buyer understands that nothing in this Agreement or any other materials presented by or on behalf of the Company to the Buyer in connection with the purchase of the Securities constitutes legal, tax or investment advice. Such Buyer has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Securities. Such Buyer understands that the Placement Agent has acted solely as the agent of the Company in this placement of the Securities and such Buyer has not relied on the business or legal advice of the Placement Agent or any of its agents, counsel or Affiliates (as defined below) in making its investment decision hereunder, and confirms that none of such persons has made any representations or warranties to such Buyer in connection with the transactions contemplated by the Transaction Documents.

h. Acknowledgment of Risks. Such Buyer acknowledges and understands that its investment in the Securities involves a significant degree of risk, including, without limitation: (i) the Company may remain a development stage business with limited operating history and requires substantial funds in addition to the proceeds from the sale of the Securities; (ii) an investment in the Company is speculative, and only Buyers who can afford the loss of their entire investment should consider investing in the Company and the Securities; (iii) such Buyer may not be able to liquidate its investment; (iv) transferability of the Securities is extremely limited; (v) in the event of a disposition of the Securities, such Buyer could sustain the loss of its entire investment; (vi) the Company has not paid any dividends on its Common Stock since inception and does not anticipate the payment of dividends in the foreseeable future; and (vii) that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

i. No Governmental Review. Such Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

j. Transfer or Resale. Such Buyer understands that, except as provided in the Registration Rights Agreement, (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder, (B) such Buyer shall have delivered to the Company an opinion of counsel, in a generally acceptable form, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (C) such Buyer provides the Company with reasonable assurance that such Securities have been or can be sold, assigned or transferred pursuant to Rule 144 promulgated under the 1933 Act (or a successor rule thereto) ("**Rule 144**"); and (ii) neither the Company nor any other Person is under any obligation to register the Securities under the 1933 Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder. As used in this Agreement, "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization or a government or any department or agency thereof or any other legal entity. Notwithstanding the foregoing, the Securities may be pledged in connection with a bona fide margin agreement or other loan secured by the Securities in accordance with Section 4(i).

k. Brokers and Finders. Other than the Placement Agent no Person will, to such Buyer's knowledge, have, as a result of the transactions contemplated by this Agreement, any valid right, interest or claim against or upon the Company or any other Buyer for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of the Buyer.

l. Certain Trading Activities. Other than with respect to the transactions contemplated herein, since the time that such Buyer was first contacted by the Company, the Placement Agent or any other Person regarding the transactions contemplated hereby, neither the Buyer nor any Affiliate of such Buyer which (i) had knowledge of the transactions contemplated hereby, (ii) has or shares discretion relating to such Buyer's investments or trading or information concerning such Buyer's investments, including in respect of the Securities, and (iii) is subject to such Buyer's review or input concerning such Affiliate's investments or trading (each a "**Trading Affiliate**") has directly or indirectly, nor has any Person acting on behalf of such Buyer or Trading Affiliate, effected or agreed to effect any purchases or sales of the securities of the Company (including, without limitation, any short sales involving the Company's securities). Notwithstanding the foregoing, in the case of a Buyer and/or Trading Affiliate that is, individually or collectively, a multi-managed investment bank or vehicle whereby separate portfolio managers manage separate portions of such Buyer's or Trading Affiliate's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Buyer's or Trading Affiliate's assets, the representation set forth above shall apply only with respect to the portion of assets managed by the portfolio manager that have knowledge about the financing transaction contemplated by this Agreement. Notwithstanding the foregoing, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to the identification of the availability of, or securing of, available shares to borrow in order to effect short sales or similar transactions in the future.

m. Legends. Each such Buyer understands that the certificates, book-entry statement, or other instruments representing the Shares, except as set forth below, shall bear a restrictive legend in substantially the following form:

> THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS OR (B) AN OPINION OF COUNSEL, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS OR (II) UNLESS SOLD PURSUANT TO RULE 144 UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

Each such Buyer further understands that the legend referenced above shall be removed, and the Company shall issue, pursuant to instructions provided by the Company to the Transfer Agent, a certificate or book-entry statement without such legend to the holder of the applicable Securities upon which it is stamped or issue to such holder by electronic delivery at the applicable balance account at the Depository Trust Company ("**DTC**"), only if (i) such Securities are sold by a Buyer pursuant to an effective registration statement registering the resale of the Securities under the 1933 Act, (ii) such Securities are sold or transferred pursuant to Rule 144 (if the transferor is not an Affiliate of the Company), or (iii) such Securities are eligible for sale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such Securities and without volume or manner-of-sale restrictions.

n. Authorization; Enforcement; Validity. To the extent a Buyer is a corporation, partnership, limited liability company or other entity, such Buyer is a validly existing corporation, partnership, limited liability company or other entity and has the requisite corporate, partnership, limited liability or other organizational power and authority to enter into the transactions contemplated by the Transaction Documents. To the extent a Buyer is an individual, such Buyer has the legal capacity to enter into the transactions contemplated by the Transaction Documents. This Agreement and the Registration Rights Agreement have been duly and validly authorized (as applicable), executed and delivered on behalf of a Buyer and are legal, valid and binding agreements of such Buyer, enforceable against such Buyer in accordance with their respective terms, except as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, liquidation, fraudulent conveyance or similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

o. No Conflicts. The execution, delivery and performance by each such Buyer of the Transaction Documents to which it is a party and the consummation by such Buyer of the transactions contemplated thereby will not (i) in the case that Buyer is a corporation, partnership, limited liability company or other entity, result in a violation of the organizational documents of Buyer, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which such Buyer is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws) applicable to such Buyer, except in the case of clauses (ii) and (iii) above, for such conflicts, defaults, rights or violations which would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of such Buyer to perform its obligations hereunder.

p. Residency. Each such Buyer's residence (if an individual) or offices in which its investment decision with respect to the Securities was made (if an entity) are located at the address immediately below Buyer's name on its signature page.

q. Representations by Non-United States persons. If Buyer is not a United States person, the Buyer hereby represents that the Buyer has satisfied the laws of the Buyer's jurisdiction in connection with any invitation to subscribe for the Securities or any use of the Transaction Documents, including (i) the legal requirements within the Buyer's jurisdiction for the purchase of the Securities, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the Securities. The Buyer's subscription and payment for, and the Buyer's continued beneficial ownership of, the Securities will not violate any applicable securities or other laws of the Buyer's jurisdiction.

r. No "Bad Actor" Disqualification Events. Neither (i) the Buyer, (ii) any of its directors, executive officers, other officers that may serve as a director or officer of any company in which it invests, general partners or managing members, nor (iii) any beneficial owner of the Company's voting equity securities (in accordance with Rule 506(d) of the Securities Act) held by the Buyer is subject to any Disqualification Event under Rule 506(d)(1) of Regulation D, except for Disqualification Events covered by Rule 506(d)(2)(ii) or (iii) or (d)(3) under the Securities Act and disclosed reasonably in advance of the Closing in writing in reasonable detail to the Company.

s. Anti-Money Laundering Laws. Such Buyer represents and warrants to, and covenants with, the Company that: (i) such Buyer is in compliance with all applicable regulations administered by the U.S. Department of the Treasury (the "**Treasury**") Office of Foreign Assets Control; (ii) such Buyer, its parents, subsidiaries, affiliated companies, officers, directors and partners, and to such Buyer's knowledge, its stockholders, owners, employees, and agents, are not on the List of Specially Designated Nationals and Blocked Persons maintained by the Treasury and have not been designated by the Treasury as a financial institution of primary money

laundering concern subject to special measures under Section 311 of the USA PATRIOT Act, Pub. L. 107-56; (iii) to such Buyer's knowledge, the funds to be used to acquire the Securities are not derived from activities that contravene applicable anti-money laundering laws and regulations; (iv) such Buyer is in compliance in all material respects with applicable anti-money laundering laws and regulations and has implemented anti-money laundering procedures that are designed to comply with applicable anti-money laundering laws and regulations, including, as applicable, the requirements of the Bank Secrecy Act, as amended by the USA PATRIOT Act, Pub. L. 107 56; and (v) to the best of its knowledge none of the funds to be provided by such Buyer are being tendered on behalf of a person or entity who has not been identified to such Buyer.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants, as of the date of this Agreement and the Closing Date to each of the Buyers and to the Placement Agent that, except as disclosed in the SEC Documents:

a. Organization and Qualification. The Company and each of its Subsidiaries have been duly organized and are validly existing and in good standing under the laws of their respective jurisdictions of organization, are duly qualified to do business and are in good standing in each jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such qualification, and have all power and authority necessary to own or hold their respective properties and to conduct the businesses in which they are engaged, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. As used in this Agreement, "**Material Adverse Effect**" means any material adverse effect on (i) the condition (financial or otherwise), prospects, earnings, business or properties of the Company and its Subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business or (ii) the ability of the Company to perform its obligations under the Transaction Documents; and "**Subsidiary**" means any entity in which the Company, directly or indirectly, owns all of the outstanding capital stock, equity or similar interests or voting power of such entity at the time of this Agreement or at any time hereafter, whether directly or through any other Subsidiary.

b. Authorization; Enforcement; Validity. The Company has full right, power and authority to execute and deliver this Agreement, the Registration Rights Agreement and the Transfer Instructions (together, the "**Transaction Documents**") and to perform its obligations under the terms of the Transaction Documents; and all action required to be taken for the due and proper authorization, execution and delivery by it of the Transaction Documents and the consummation by it of the transactions contemplated hereby has been duly and validly taken. This Agreement and the other Transaction Documents have been duly executed and delivered by the Company, and constitute the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, except as may be limited by bankruptcy, insolvency, fraudulent conveyance or similar laws affecting creditors' rights generally and general principles of equity.

c. Issuance of Shares. The Shares have been duly and validly authorized and, when issued and paid for pursuant to this Agreement, will be validly issued, fully paid and

nonassessable, and shall be free and clear of all encumbrances and restrictions, except for restrictions on transfer set forth in the Transaction Documents or imposed by applicable securities laws. Assuming the accuracy of the representations and warranties of the Buyers contained in Section 2 hereof, the issuance by the Company of the Shares is in compliance with all applicable federal and state securities laws and exempt from registration under the 1933 Act and applicable state securities laws.

d. No Conflicts. The execution, delivery and performance by the Company of the Transaction Documents, the issuance and sale of the Shares and the consummation of the transactions contemplated by the Transaction Documents will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, result in the termination, modification or acceleration of, or result in the creation or imposition of any lien, charge or encumbrance upon any property, right or asset of the Company or any of its Subsidiaries pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is bound or to which any property, right or asset of the Company or any of its Subsidiaries is subject, (ii) result in any violation of the provisions of the charter or by-laws or similar organizational documents of the Company or any of its Subsidiaries or (iii) result in the violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (i) and (iii) above, for any such conflict, breach, violation, default, termination, modification, acceleration, lien, charge or encumbrance that would not, individually or in the aggregate, have a Material Adverse Effect. The execution, delivery and performance by the Company of the Transaction Documents and the filings contemplated by the Registration Rights Agreement, the offer, issuance and sale of the Securities require no consent of, action by or in respect of, or filing with, any person, governmental body, agency, or official other than (a) filings that have been made pursuant to applicable state securities laws, (b) post-sale filings pursuant to applicable state and federal securities laws, (c) filings pursuant to the rules and regulations of any securities exchange on which the Securities may be listed and (d) filing of the registration statement required to be filed by the Registration Rights Agreement, each of which the Company has filed or undertakes to file within the applicable time.

e. No Violation or Default. Neither the Company nor any of its Subsidiaries is (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is bound or to which any property or asset of the Company or any of its Subsidiaries is subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (ii) and (iii) above, for any such default or violation that would not, individually or in the aggregate, have a Material Adverse Effect.

f. SEC Documents; Financial Statements; Sarbanes-Oxley.

(i) Since October 2, 2019, the Company has filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the

reporting requirements of the Securities Exchange Act of 1934, as amended (the "**1934 Act**") (all of the foregoing filed prior to the date this representation is made (including all exhibits included therein and financial statements and schedules thereto and documents incorporated by reference therein), collectively being hereinafter referred to as the "**SEC Documents**"). The Company has made available to the Buyers or their respective representatives, or filed and made publicly available on the SEC's Electronic Data Gathering, Analysis, and Retrieval system (or successor thereto) ("**EDGAR**") no less than two (2) days prior to the date this representation is made, true and complete copies of the SEC Documents. Each of the SEC Documents was filed with the SEC within the time frames prescribed by the SEC for the filing of such SEC Documents such that each filing was timely filed with the SEC. As of their respective dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents. None of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. Since the filing of the SEC Documents, no event has occurred that would require an amendment or supplement to any of the SEC Documents and as to which such an amendment has not been filed and made publicly available on the SEC's EDGAR system no less than two (2) days prior to the date this representation is made. The Company has not received any written comments from the SEC staff that have not been resolved to the satisfaction of the SEC staff.

(ii) As of their respective dates, the consolidated financial statements of the Company and its Subsidiaries included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with United States generally accepted accounting principles ("**GAAP**"), consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes) and fairly present in all material respects the consolidated financial position of the Company and its Subsidiaries as of the dates thereof and the consolidated results of their operations and cash flows for the periods then ended (subject, in the case of unaudited statements for periods subsequent to December 31, 2019, to normal year-end audit adjustments). None of the Company, its Subsidiaries and their respective officers, directors and Affiliates or, to the Company's Knowledge (as defined below), any stockholder of the Company has made any filing with the SEC (other than the SEC Documents), issued any press release or made, distributed, paid for or approved (or engaged any other Person to make or distribute) any other public statement, report, advertisement or communication on behalf of the Company or any of its Subsidiaries that contains any untrue statement of a material fact or omits any statement of material fact necessary in order to make the statements therein, in the light of the circumstances under which they are or were made, not misleading or has provided any other information to the Buyers, including information referred to in Section 2.d, that contains any untrue statement of a material fact or, with respect to written information, omits to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they are or were made, not misleading. The Company is not required to file and will not be required to file any agreement, note, lease, mortgage, deed or other instrument entered into prior to the date this representation is made and to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is bound that has not been previously filed as an exhibit (including by way of

incorporation by reference) to the Company's reports filed or made with the SEC under the 1934 Act. To the Company's Knowledge, the accounting firm that expressed its opinion with respect to the consolidated financial statements included in the Company's most recently filed Annual Report on Form 10-K, and reviewed the consolidated financial statements included in the Company's most recently filed quarterly report on Form 10-Q, was an independent registered public accounting firm pursuant to the standards set forth in Rule 2-01 of Regulation S-X promulgated by the SEC and as required by the applicable rules and guidance from the Public Company Accounting Oversight Board, and such firm was otherwise qualified to render such opinion under applicable law and the rules and regulations of the SEC. There is no transaction, arrangement or other relationship between the Company and an unconsolidated or other off-balance-sheet entity that is required to be disclosed by the Company in its reports pursuant to the 1934 Act that has not been so disclosed in the SEC Documents.

(iii) The Company is in all material respects in compliance with applicable provisions of the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations thereunder (collectively, "**Sarbanes-Oxley**").

(iv) Since December 31, 2019, neither the Company nor any of its Subsidiaries nor, to the Company's Knowledge, any director, officer or employee, of the Company or any of its Subsidiaries, has received or otherwise obtained any material complaint, allegation, assertion or claim, whether written or oral, regarding the accounting or auditing practices, procedures, methodologies or methods of the Company or any of its Subsidiaries or its internal accounting controls, including any complaint, allegation, assertion or claim that the Company or any of its Subsidiaries has engaged in questionable accounting or auditing practices. No attorney representing the Company or any of its Subsidiaries, whether or not employed by the Company or any of its Subsidiaries, has reported evidence of a material violation of securities laws, breach of fiduciary duty or similar violation by the Company or any of its Subsidiaries or any of their respective officers, directors, employees or agents to the Company Board or any committee thereof or to any director or officer of the Company pursuant to Section 307 of Sarbanes-Oxley, and the SEC's rules and regulations promulgated thereunder. Since October 2, 2019, there have been no internal or SEC investigations regarding accounting or revenue recognition discussed with, reviewed by or initiated at the direction of the chief executive officer, principal financial officer, the Company's Board of Directors (the "**Company Board**") or any committee thereof. The Company is not, and never has been, a "shell company" (as defined in Rule 12b-2 under the 1934 Act).

(v) As used in this Agreement, the "**Company's Knowledge**" or "**Knowledge of the Company**" and similar language means, unless otherwise specified, the actual knowledge of any "director" or "officer" (as such term is defined in Rule 16a-1 under the 1934 Act) of the Company, including David L. Lucchino and Richard Mitrano, and such knowledge as such person or persons would reasonably be expected to have after reasonable inquiry with respect to matters in question.

g. Internal Accounting Controls; Disclosure Controls and Procedures. The Company and each of its Subsidiaries maintain a system of internal accounting controls designed to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to

permit preparation of financial statements in conformity with generally accepted accounting principles in the United States and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and its Subsidiaries' internal controls over financial reporting are effective and the Company and its Subsidiaries are not aware of any material weakness in their internal controls over financial reporting. The Company and its Subsidiaries maintain "disclosure controls and procedures" (as such term is defined in Rule 13a-15(e) under the 1934 Act and the rules and regulations promulgated thereunder); and such disclosure controls and procedures are effective at the reasonable assurance level.

h. Absence of Certain Changes. Since December 31, 2019, there have been no events, occurrences or developments that have or would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect. The Company has not taken any steps to seek protection pursuant to any bankruptcy law. The Company has not, since the date of the latest financial statements included within its SEC Documents, materially altered its method of accounting or the manner in which it keeps its books and records.

i. Absence of Litigation. (i) There are no legal, governmental or regulatory investigations, actions, demands, claims, suits, arbitrations, inquiries or proceedings pending or, to the Company's Knowledge, threatened, to which the Company, any of its Subsidiaries or any of their respective officers or directors is or may reasonably be expected to become a party or to which any property of the Company or any of its Subsidiaries is or may reasonably be expected to become the subject that, individually or in the aggregate, if determined adversely to the Company or any of its Subsidiaries, could reasonably be expected to have a Material Adverse Effect, and (ii) none of the directors or officers of the Company has been involved (as a plaintiff, defendant, witness or otherwise) in securities-related litigation. The SEC has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the 1934 Act or the 1933 Act.

j. Tests and Preclinical and Clinical Trials. (i) Except for such noncompliance as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the preclinical studies, clinical studies, and clinical trials conducted by or on behalf of or sponsored by the Company or its Subsidiaries ("**Studies**") were and, if still ongoing, are being conducted in accordance with the Federal Food, Drug, and Cosmetic Act (21 U.S.C. Section 301 et seq.), and the implementing regulations thereunder ("**FDCA**"), including 21 C.F.R. Parts 11, 50, 54, 56, 58, and 312, and any applicable laws, rules and regulations of the jurisdiction in which such Studies are being conducted; and (ii) the Company and its Subsidiaries have not received any written notices, correspondence or other communications from the U.S. Food and Drug Administration ("**FDA**") or any governmental or regulatory authority requiring or threatening the termination or suspension of any Studies.

k. FDA Compliance. Except for such noncompliance as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company and its Subsidiaries: (i) are, and at all times since July 1, 2017 have been, in compliance with the FDCA; (ii) possess all licenses, certificates, approvals, clearances, exemptions, authorizations,

permits, registrations and supplements or amendments thereto required by the FDCA ("**Authorizations**") and such Authorizations are valid and in full force and effect and the Company and its Subsidiaries are not in violation of any term of any such Authorizations; (iii) have not received written notice that the FDA has taken, is taking or intends to take action to suspend, revoke or limit any Authorizations and have no knowledge that any such action is threatened; (iv) since January 1, 2017 have not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from the FDA alleging or asserting non-compliance with the FDCA or the Authorizations.

l. Acknowledgment Regarding Buyer's Purchase of the Shares. The Company acknowledges and agrees that each of the Buyers is acting solely in the capacity of an arm's-length purchaser with respect to the Company in connection with the Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that each Buyer is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by any of the Buyers or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Buyer's purchase of the Shares. The Company further represents to each Buyer that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

m. No Material Adverse Effect; No Undisclosed Liabilities. Since December 31, 2019, there has been no Material Adverse Effect. Other than (i) the liabilities assumed or created pursuant to this Agreement and the other Transaction Documents, (ii) liabilities accrued for in the latest balance sheet included in the Company's most recent periodic report (on Form 10-Q or Form 10-K) (the date of such balance sheet, the "**Latest Balance Sheet Date**") and (iii) liabilities incurred in the ordinary course of business consistent with past practices since the Latest Balance Sheet Date, the Company and its Subsidiaries do not have any other material liabilities (whether fixed or unfixed, known or unknown, absolute or contingent, asserted or unasserted, choate or inchoate, liquidated or unliquidated, or secured or unsecured, and regardless of when any action, claim, suit or proceeding with respect thereto is instituted).

n. General Solicitation. Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged or will engage in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Securities.

o. No Integrated Offering. Neither the Company, nor, to the Knowledge of the Company, any of its affiliates or any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of any of the Securities under the 1933 Act or cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of the 1933 Act.

p. Employee Relations. No labor disturbance by or dispute with the employees of the Company or any of its Subsidiaries exists or, to the Company's Knowledge, is

threatened or imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its Subsidiaries' principal suppliers, contractors or customers, except as would not have a Material Adverse Effect.

q. Employee Benefits. (i) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), for which the Company or any member of its "Controlled Group" (defined as any entity, whether or not incorporated, that is under common control with the Company within the meaning of Section 4001(a)(14) of ERISA or any entity that would be regarded as a single employer with the Company under Section 414(b),(c),(m) or (o) of the Code) would have any liability (each, a "**Plan**") has been maintained in compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Code; (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan, excluding transactions effected pursuant to a statutory or administrative exemption; (iii) for each Plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no Plan has failed (whether or not waived), or is reasonably expected to fail, to satisfy the minimum funding standards (within the meaning of Section 302 of ERISA or Section 412 of the Code) applicable to such Plan; (iv) no Plan is, or is reasonably expected to be, in "at risk status" (within the meaning of Section 303(i) of ERISA) and no Plan that is a "multiemployer plan" within the meaning of Section 4001(a)(3) of ERISA is in "endangered status" or "critical status" (within the meaning of Sections 304 and 305 of ERISA) (v) the fair market value of the assets of each Plan exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan); (vi) no "reportable event" (within the meaning of Section 4043(c) of ERISA and the regulations promulgated thereunder) has occurred or is reasonably expected to occur; (vii) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified, and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification; (viii) neither the Company nor any member of the Controlled Group has incurred, nor reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guarantee Corporation, in the ordinary course and without default) in respect of a Plan (including a "multiemployer plan" within the meaning of Section 4001(a)(3) of ERISA); and (ix) none of the following events has occurred or is reasonably likely to occur: (A) a material increase in the aggregate amount of contributions required to be made to all Plans by the Company or its Controlled Group affiliates in the current fiscal year of the Company and its Controlled Group affiliates compared to the amount of such contributions made in the Company's and its Controlled Group affiliates' most recently completed fiscal year; or (B) a material increase in the Company and its Subsidiaries' "accumulated post-retirement benefit obligations" (within the meaning of Accounting Standards Codification Topic 715-60) compared to the amount of such obligations in the Company and its Subsidiaries' most recently completed fiscal year, except in each case with respect to the events or conditions set forth in (i) through (ix) hereof, as would not, individually or in the aggregate, have a Material Adverse Effect.

r. Intellectual Property Rights. (i) Except as would not, individually or in the aggregate, have a Material Adverse Effect, the Company and its Subsidiaries own or have right to use all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, domain names and other source indicators, copyrights and copyrightable works, know-how, trade secrets, systems, procedures, proprietary or confidential

information and all other worldwide intellectual property, industrial property and proprietary rights (collectively, "**Intellectual Property**") currently used in the conduct of their respective businesses, free and clear of all liens, security interests or encumbrances and such Intellectual Property is subsisting and unexpired, and to the Knowledge of the Company, valid and enforceable; (ii) the Company's and its Subsidiaries' conduct of their respective businesses does not materially infringe, misappropriate or otherwise violate any Intellectual Property rights of any person (provided that, with respect to patents, the foregoing representation is being made to the Knowledge of the Company); (iii) the Company and its Subsidiaries have not received any written notice of any material claim relating to Intellectual Property; (iv) to the Knowledge of the Company, the Intellectual Property of the Company and its Subsidiaries is not being infringed, misappropriated or otherwise violated by any person; (v) except as described in the SEC Documents, there are no actions pending, or to the Knowledge of the Company, threatened against the Company or its Subsidiaries relating to Intellectual Property; and (vi) the Company and its Subsidiaries have taken all reasonable steps to protect, maintain and safeguard their Intellectual Property and to require all employees and contractors (A) with access to trade secrets and confidential information to execute non-disclosure and confidentiality agreements with the Company or its Subsidiaries, as applicable and (B) who have been involved in the creation, invention or development of material Intellectual Property for or on behalf of the Company to assign in writing to the Company or its Subsidiaries, as applicable, all of their rights therein, except where the Company or its Subsidiaries, as applicable, acquired ownership of such Intellectual Property by operation of law.

s. Cybersecurity; Data Protection. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company and its Subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases owned by the Company (collectively, "**IT Systems**") are adequate for, and operate and perform as required in connection with the operation of the business of the Company and its Subsidiaries as currently conducted, free and clear of all bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and its Subsidiaries have implemented and maintained commercially reasonable controls, policies, procedures, and safeguards designed to maintain and protect their material trade secrets and confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data (including all personal, personally identifiable, sensitive, confidential or regulated data ("**Personal Data**")) used in connection with their businesses. To the Knowledge of the Company, there have been no breaches, violations, outages or unauthorized uses of or accesses to the foregoing, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same. The Company and its Subsidiaries are presently in compliance in all material respects with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification; and the Company and its Subsidiaries have implemented backup and disaster recovery technology reasonably consistent with industry standards and practices.

t. Compliance with Health Care Laws. The Company and its subsidiaries are, and since January 1, 2017 have been, in compliance with all applicable Health Care Laws, except

where such noncompliance would not individually or in the aggregate reasonably be expected to have a Material Adverse Effect. For purposes of this Agreement, "Health Care Laws" means the following laws and regulations and any state or foreign counterpart of such laws or regulations: (i) the FDCA and 42 U.S.C. Section 282(j) of the Public Health Service Act; (ii) all applicable federal, state, local and foreign health care fraud and abuse laws, including, without limitation, the Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the civil False Claims Act (31 U.S.C. Section 3729 et seq.), the criminal False Claims Act and False Statements Law (42 U.S.C. Section 1320a-7b(a)), 18 U.S.C. Sections 286 and 287, the health care fraud criminal provisions under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") (42 U.S.C. Section 1320d et seq.), the Civil Monetary Penalties Law (42 U.S.C. Sections 1320a-7a), the Exclusions Law (42 U.S.C. Section 1320a-7), and the transparency reporting requirements under 42 U.S.C. Section 1320a-7h; (iii) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.) and all other laws related to health information or medical records; (iv) the Medicare (Title XVIII of the Social Security Act) and Medicaid (Title XIX of the Social Security Act) statutes; and (v) the regulations promulgated pursuant to such laws. Neither the Company nor any of its subsidiaries has, since January 1, 2017, received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or other governmental or regulatory authority or third party alleging that any product operation or activity of the Company or any of its subsidiaries is in material violation of any Health Care Laws nor, to the Company's Knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened. Neither the Company nor any of its subsidiaries is a party to any corporate integrity agreements, monitoring agreements, deferred prosecution agreements, consent decrees, settlement orders, plan of correction or similar agreements with or imposed by any governmental or regulatory authority. Additionally, none of the Company, its subsidiaries, or their respective employees, officers, directors, or, to the Company's Knowledge, agents, has been excluded, suspended, debarred or disqualified from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company or its subsidiaries, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in any such exclusion, suspension, debarment or disqualification.

u. Environmental Laws. (i) The Company and its Subsidiaries (x) are in compliance with all, and have not violated any, applicable federal, state, local and foreign laws, rules, regulations, requirements, decisions, judgments, decrees, orders and other legally enforceable requirements relating to pollution or the protection of human health or safety, the environment, natural resources, hazardous or toxic substances or wastes, including biohazardous and medical waste, pollutants or contaminants (collectively, "**Environmental Laws**"); (y) have received and are in compliance with all, and have not violated any, permits, licenses, certificates or other authorizations or approvals required of them under any Environmental Laws to conduct their respective businesses; and (z) have not received notice of any actual or potential liability or obligation under or relating to, or any actual or potential violation of, any Environmental Laws, including for the investigation or remediation of any use, disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, or relating to human exposure to hazardous or toxic substances or wastes and have no knowledge of any event or condition that would reasonably be expected to result in any such notice, and (ii) there are no costs or liabilities associated with Environmental Laws of or relating to the Company or its Subsidiaries, except in the case of each of (i) and (ii) above, for any such matter as would not, individually or in the aggregate, reasonably

be expected to have a Material Adverse Effect; and (iii) except as described in the SEC Documents, (x) there is no proceeding that is pending, or, to the Company's Knowledge, contemplated, against the Company or any of its Subsidiaries under any Environmental Laws in which a governmental or regulatory authority is also a party, other than such proceeding regarding which it is reasonably believed no monetary sanctions of $100,000 or more will be imposed, (y) the Company and its Subsidiaries are not aware of any facts or issues regarding compliance with Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, that could reasonably be expected to have a Material Adverse Effect, and (z) none of the Company or its Subsidiaries anticipates material capital expenditures relating to any Environmental Laws.

v. Real Property. Each of the Company and each of its Subsidiaries owns or leases all such properties as are necessary to the conduct of its operations as presently conducted, except as would not reasonably be expected to have a Material Adverse Effect.

w. Insurance. The Company and its Subsidiaries have insurance covering their respective properties, operations, personnel and businesses, including business interruption insurance, which insurance the Company believes is in amounts and insures against such losses and risks as are adequate to protect the Company and its Subsidiaries and their respective businesses; and neither the Company nor any of its Subsidiaries has (i) received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance or (ii) any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage at reasonable cost from similar insurers as may be necessary to continue its business.

x. Regulatory Permits and Other Regulatory Matters. The Company and its Subsidiaries possess all licenses, sub-licenses, certificates, permits, registrations and other authorizations issued by, and have made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses as described in the SEC Documents, except where the failure to possess or make the same would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and neither the Company nor any of its Subsidiaries has received written notice of any revocation or modification of any such license, sub-license, certificate, permit, registration or authorization or has any reason to believe that any such license, sub-license, certificate, permit, registration or authorization required for continued operation of the business will not be renewed in the ordinary course, except where such modification or revocation or failure to renew would not reasonably be expected to have a Material Adverse Effect.

y. Listing. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the 1934 Act, and the Company has taken no action designed to, or which to the Company's Knowledge, is likely to have the effect of, terminating the registration of the Common Stock under the 1934 Act nor has the Company received any notification that the SEC is contemplating terminating such registration. The Company has not, in the 12 months preceding the date hereof, received notice from the Nasdaq Global Select Market (the "**Principal Market**") that the Company is not in compliance with the listing or maintenance requirements of such Principal

Market. The Company is as of the date hereof, will be as of the date of the issuance of the Shares pursuant to the Transaction Documents, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements. The Common Stock is eligible for clearing through DTC, through its Deposit/Withdrawal At Custodian (DWAC) system, and the Company is eligible and participating in the Direct Registration System (DRS) of DTC with respect to the Common Stock.

z. Tax Status. The Company and its Subsidiaries have paid all federal, state, local and foreign taxes and filed all tax returns required to be paid or filed through the date hereof, except for those taxes and tax returns where such failure to pay or file would not reasonably be expected to have a Material Adverse Effect; and there is no tax deficiency that has been, or in the Company's estimation could reasonably be expected to be, asserted against the Company or any of its Subsidiaries or any of their respective properties or assets that would reasonably be expected to have a Material Adverse Effect.

aa. Transactions With Affiliates. None of the Company's or any Subsidiary's respective officers or directors, Persons who were officers or directors of the Company or any Subsidiary at any time during the previous two years, stockholders, or affiliates of the Company or any of its Subsidiaries, or with any individual related by blood, marriage or adoption to any such individual (each a "**Related Party**"), is presently, or has been within the past two years, a party to any transaction, contract, agreement, instrument, commitment, understanding or other arrangement or relationship with the Company or any of its Subsidiaries (other than directly for services as an employee, officer and/or director), whether for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments or consideration to or from any such Related Party. No Related Party of the Company or any of its Subsidiaries or any of their respective Affiliates, has any direct or indirect ownership interest in any Person (other than ownership of less than 1% of the outstanding common stock of a publicly traded corporation) in which the Company or any of its Subsidiaries has any direct or indirect ownership interest or has a business relationship or with which the Company or any of its Subsidiaries competes. "**Affiliate**" for purposes hereof means, with respect to any Person, another Person that, (i) is a director, officer, manager, managing member, general partner or 5% or greater owner of equity interests in such Person, or (ii) directly or indirectly, (1) has a common ownership with that Person, (2) controls that Person, (3) is controlled by that Person or (4) shares common control with that Person. "**Control**" or "controls" for purposes hereof means that a person or entity has the power, direct or indirect, to conduct or govern the policies of another Person.

bb. No Unlawful Payments. Neither the Company nor any of its Subsidiaries nor any director, officer or employee of the Company or any of its Subsidiaries nor, to the Knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or any of its Subsidiaries has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made or taken an act in furtherance of an offer, promise or authorization of any direct or indirect unlawful payment or benefit to any foreign or domestic government or regulatory official or employee, including of any government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office; (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, or any applicable law or

regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption law; or (iv) made, offered, agreed, requested or taken an act in furtherance of any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit. The Company and its Subsidiaries have instituted, maintain and enforce, and will continue to maintain and enforce policies and procedures designed to promote and ensure compliance with all applicable anti-bribery and anti-corruption laws.

cc. Compliance with Anti-Money Laundering Laws. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements, including those of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the applicable money laundering statutes of all jurisdictions where the Company or any of its Subsidiaries conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental or regulatory agency (collectively, the "Anti-Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental or regulatory agency, authority or body or any arbitrator involving the Company or any of its Subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the Knowledge of the Company, threatened.

dd. No Conflicts with Sanctions Laws. Neither the Company nor any of its Subsidiaries, directors, officers, or employees, nor, to the Knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or any of its Subsidiaries is currently the subject or the target of any sanctions administered or enforced by the U.S. government, (including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State and including, without limitation, the designation as a "specially designated national" or "blocked person"), the United Nations Security Council, the European Union, Her Majesty's Treasury or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company or any of its Subsidiaries located, organized or resident in a country or territory that is the subject or target of Sanctions, including, without limitation, Cuba, Iran, North Korea, Syria and the Crimea Region of the Ukraine (each, a "Sanctioned Country"); and the Company will not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions, (ii) to fund or facilitate any activities of or business in any Sanctioned Country or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions. For the past five years, the Company and its Subsidiaries have not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.

ee. No Other Agreements. The Company has not, directly or indirectly, made any agreements with any Buyers relating to the terms or conditions of the transactions contemplated by the Transaction Documents except as set forth in the Transaction Documents.

ff. No Undisclosed Relationships. No relationship, direct or indirect, exists between or among the Company or any of its Subsidiaries, on the one hand, and the directors, officers, stockholders, customers, suppliers or other affiliates of the Company or any of its Subsidiaries, on the other, that is required by the 1934 Act to be described in the SEC Documents and that is not so described in such documents.

gg. No Restrictions on Subsidiaries. No Subsidiary of the Company is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, from paying any dividends to the Company, from making any other distribution on such Subsidiary's capital stock or similar ownership interest, from repaying to the Company any loans or advances to such Subsidiary from the Company or from transferring any of such Subsidiary's properties or assets to the Company or any other Subsidiary of the Company.

hh. Investment Company. The Company is not and, after giving effect to the offering and sale of the Shares, will not be required to register as an "investment company" or an entity "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder.

ii. No Bad Actors. No "bad actor" disqualifying event described in Rule 506(d)(1)(i)-(viii) of the 1933 Act (a "**Disqualification Event**") is applicable to the Company or, to the Company's Knowledge, any person listed in the first paragraph of Rule 506(d)(1) promulgated under the 1933 Act, except (i) for a Disqualification Event as to which Rule 506(d)(2)(ii–iv) or (d)(3) promulgated under the 1933 Act is applicable and (ii) no such representation is made with respect to the Placement Agent, or any of its general partners, managing members, directors, executive officers or other officers.

jj. Manipulation of Prices, Securities. None of the Company or its Subsidiaries, or, to the Knowledge of the Company, any of their respective officers, directors or Affiliates and, to the Company's Knowledge, no one acting on any such Person's behalf has, (A) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company or any Subsidiary to facilitate the sale or resale of any of the Securities, (B) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (C) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company or any Subsidiary, other than, in the case of clauses (B) and (C), compensation paid to the Placement Agent in connection with the placement of the Securities.

kk. Disclosure. The Company understands and confirms that each of the Buyers will rely on the foregoing representations in effecting transactions in securities of the Company. Taken as a whole, all disclosure provided to the Buyers regarding the Company, its business and the transactions contemplated hereby furnished by or on behalf of the Company is true and correct and does not contain any untrue statement of a material fact or with respect to written information omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading.

4. COVENANTS.

a. Best Efforts. Each party shall use its best efforts to timely satisfy each of the conditions to be satisfied by it as provided in Sections 5 and 6 of this Agreement.

b. Form D and Blue Sky. The Company agrees to timely file a Form D with respect to the Securities as required under Regulation D and, upon request, to provide a copy thereof to each Buyer promptly after such filing. The Company shall, on or before the Closing Date, take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to qualify the Securities for, sale to the Buyers at the Closing occurring on the Closing Date pursuant to this Agreement under applicable securities or "**Blue Sky**" laws of the states of the United States, and shall provide promptly upon the request of any Buyers evidence of any such action so taken. The Company shall make all filings and reports relating to the offer and sale of the Securities required under applicable securities or "**Blue Sky**" laws of the states of the United States following the Closing Date.

c. Reporting Status. From the date of this Agreement until the first date on which the Securities cease to be Registrable Securities (as defined in the Registration Rights Agreement) (the period ending on such date, the "**Reporting Period**"), the Company shall timely (including by giving effect to any extensions pursuant to Rule 12b-25 of the 1934 Act) file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall (i) not voluntary terminate its status as an issuer required to file reports under the 1934 Act and (ii) take all actions reasonably necessary to maintain its eligibility to register the Shares for resale by the Investors on Form S-3 or, if it is ineligible to use Form S-3, on Form S-1.

d. Use of Proceeds. The Company will use the proceeds from the sale of the Shares for development of its product candidates.

e. Expenses. At the Closing, the Company and the Buyers shall each pay all of their own legal, due diligence and other expenses, including fees and expenses of attorneys, investigative and other consultants and travel costs and all other expenses, relating to negotiating and preparing the Transaction Documents and consummating the transactions contemplated hereby and thereby. The Company shall pay all Transfer Agent fees incurred in connection with the sale and issuance of the Securities to the Buyers.

f. Disclosure of Transactions and Other Material Information. The Company shall file, within the timeframe required under applicable SEC rules, one or more Current Reports on Form 8-K with the SEC describing the terms of the transactions contemplated by the Transaction Documents and including as exhibits to such Form 8-K this Agreement and the Registration Rights Agreement (such Form or Forms 8-K, collectively, the "**Announcing Form 8-K**"). Unless required by applicable law or a rule of the Principal Market, the Company shall not make any public announcement regarding the transactions contemplated hereby or the other Transaction Documents prior to the Closing Date. The Company confirms that, following the filing of the Announcing Form 8-K, no Buyer will be deemed to be in possession of material non-public information concerning the Company (to the extent that such information was provided by the Company prior to the filing of such Form 8-K). The Company shall not, and shall cause each of its Subsidiaries and its and each of their respective officers, directors, employees and agents to not, provide any Buyer with any material non-public information regarding the Company or any of its Subsidiaries from and after the filing of the Announcing Form 8-K with the SEC without the

express prior written consent of such Buyer, unless prior thereto such Buyer shall have executed a written agreement regarding the confidentiality and use of such information. The Company understands and confirms that each Buyer shall be relying on the foregoing covenant in effecting transactions in securities of the Company. Subject to the foregoing, neither the Company nor any Buyer shall issue any press releases or any other public statements with respect to the transactions contemplated hereby or disclosing the name of any Buyer; *provided*, *however*, that the Company shall be entitled, without the prior approval of any Buyer, to make any press release or other public disclosure with respect to such transactions (i) in substantial conformity with the Announcing Form 8-K and contemporaneously therewith and (ii) as is required by applicable law and regulations (*provided* that each Buyer shall be consulted by the Company in connection with any such press release or other public disclosure prior to its release and shall be provided with a copy thereof), and *provided further*, that the Company may issue any other announcement or press release regarding the transactions contemplated hereby, so long as such announcement or press release does not disclose the name of any Buyer. Notwithstanding anything to the contrary herein, in the event that the Company believes that a notice or communication to any Buyer contains material, non-public information relating to the Company or any of its Subsidiaries, the Company shall so indicate to the Buyers contemporaneously with delivery of such notice or communication, and such indication shall provide the Buyers the means to refuse to receive such notice or communication; and in the absence of any such indication, the holders of the Securities shall be allowed to presume that all matters relating to such notice or communication do not constitute material, non-public information relating to the Company or any of its Subsidiaries.

g. USA PATRIOT Act, Investor Secrecy Act and Office of Foreign Assets Control. As required by federal law and each Buyer's policies and practices, each Buyer may need to obtain, verify and record certain customer identification information and documentation in connection with opening or maintaining accounts, or establishing or continuing to provide services, and, from the date of this Agreement until the end of the Reporting Period, the Company agrees to, and shall cause each of its Subsidiaries to, provide such information to each Buyer.

h. Transfer Instructions. The Company shall issue the Transfer Instructions; the Company warrants that no instruction other than the Transfer Instructions and stop transfer instructions to give effect to the provisions of Section 2(j) will be given by the Company to its transfer agent and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the Registration Rights Agreement.

i. Pledge of Securities. The Company acknowledges and agrees that the Securities may be pledged by a holder thereof in connection with a bona fide margin agreement or other loan secured by the Securities. The pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no such holder effecting any such pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to any Transaction Document; provided that such holder and its pledgee shall be required to comply with the provisions of Section 2(j) order to effect a sale, transfer or assignment of Securities to such pledgee. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Securities may reasonably request in connection with a pledge of the Securities to such pledgee by a holder of Securities.

j. Regulation M. Neither the Company nor its Subsidiaries has taken or shall take any action prohibited by Regulation M under the 1934 Act, in connection with the offer, sale and delivery of the Securities contemplated hereby.

k. Disqualification Events. The Company will notify the Buyers in writing, prior to the Closing Date of any Disqualification Event relating to any Covered Person of which the Company becomes aware to the Company's Knowledge.

l. No Integrated Offering. Neither the Company nor any of its Subsidiaries, nor any Person acting on the behalf of any of the foregoing, shall, directly or indirectly, make any offers or sales of any security or solicit any offers to purchase any security, under any circumstances that would require registration of any of the Securities under the 1933 Act or require stockholder approval of the issuance of any of the Securities.

m. Listing. In the time and manner required by the Principal Market, the Company shall prepare and file with such Principal Market a Listing of Additional Shares Notification Form (the "**LAS**") covering all of the Securities, and shall maintain the authorization for quotation of the Common Stock on the Principal Market. During the Reporting Period, neither the Company nor any of the Company's Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock on the Principal Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 4(m).

n. Transfer Taxes. The Company shall be responsible for any liability with respect to any transfer, stamp or similar non-income taxes that may be payable in connection with the issuance of the Securities.

o. Further Instruments and Acts. From the date of this Agreement until the end of the Reporting Period, upon request of any Buyer or Investor (as defined in the Registration Rights Agreement), the Company will execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purposes of this Agreement and the other Transaction Documents.

p. Lockup. For a period of 45 days after the date hereof, the Company will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the SEC a registration statement under the 1933 Act relating to, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, or publicly disclose the intention to undertake any of the foregoing, or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, without the prior written consent of the Placement Agent, other than (A) the Shares to be sold hereunder and their registration pursuant to the Registration Rights Agreement, (B) any shares of Common Stock issued in exchange for securities outstanding on the date of this Agreement and described in the SEC Documents, (C) any options or other awards granted under any stock-based compensation

plans of the Company and its Subsidiaries described in the SEC Documents (the "**Company Stock Plans**"), (D) any shares of Common Stock issued upon the exercise of options or with respect to any other awards granted under the Company Stock Plans, (E) the filing by the Company of any registration statement on Form S-8 or any successor form thereto relating to any of the Company Stock Plans, and (F) shares of Common Stock or other securities issued in connection with a transaction with an unaffiliated third party that includes a *bona fide* commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements or licensing agreements) or any acquisition of assets of not less than a majority or controlling portion of the equity of another entity; *provided that* (x) the aggregate number of the shares issued pursuant to clause (F) shall not exceed more than five percent (5%) of the outstanding shares of Common Stock immediately following the issuance and sale of the Shares pursuant to this Agreement and the recipients of such shares execute a Lock-Up Agreement in the form of Exhibit B hereto.

5. CONDITIONS TO THE COMPANY'S OBLIGATION TO SELL. The obligation of the Company to issue and sell the Securities to each Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions; *provided* that these conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion by providing each Buyer with prior written notice thereof:

a. Such Buyer shall have executed each of the Transaction Documents to which it is a party and delivered the same to the Company.

b. Such Buyer shall have delivered to the Company the Purchase Price for the Shares being purchased by such Buyer at the Closing by wire transfer of immediately available funds pursuant to the wire instructions provided by the Company.

c. The representations and warranties of such Buyer shall be true and correct in all material respects (except for those representations and warranties which are qualified as to materiality, in which case such representations and warranties shall be true and correct in all respects) as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct in all material respects as of such date), and such Buyer shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by such Buyer at or prior to the Closing Date.

d. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

e. The Nasdaq Global Select Market shall not have notified the Company of any objections to the LAS submitted by the Company with respect to the Shares.

6. CONDITIONS TO EACH BUYER'S OBLIGATION TO PURCHASE. The obligation of each Buyer hereunder to purchase the Securities from the Company at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions;

provided that these conditions are for each Buyer's sole benefit and may be waived only by such Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

a. The Company shall have executed each of the Transaction Documents to which it is a party and delivered the same to such Buyer.

b. The representations and warranties of the Company and its Subsidiaries shall be true and correct in all material respects (except for representations or warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such date) and the Company and its Subsidiaries shall have performed, satisfied and complied with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company and its Subsidiaries at or prior to the Closing Date. Such Buyer shall have received a certificate, executed by either the chief executive officer or the chief financial officer of the Company, dated as of the Closing Date, to the foregoing effect and as to such other matters as may be reasonably requested by such Buyer.

c. Such Buyer shall have received the opinion of Latham, dated as of the Closing Date and addressed to the Buyers and the Placement Agent, in a form reasonably satisfactory to the Buyers.

d. The Company shall have executed and delivered the Transfer Instructions, acknowledged in writing by the Transfer Agent, with respect to the Shares being purchased by such Buyer at the Closing to the Transfer Agent and delivered a copy thereof to such Buyer.

e. The Company Board shall have adopted, and not rescinded or otherwise amended or modified, resolutions consistent with Section 3.b (the "**Resolutions**").

f. Upon written request of a Buyer, the Company shall have delivered to such Buyer (i) a certificate evidencing the incorporation or organization and good standing of the Company in its state of incorporation and (ii) a certificate evidencing the Company's qualification as a foreign corporation and good standing in the state of its principal place of business issued by the Secretary of State (or other applicable authority) of such state of incorporation or principal place of business as of a date within five (5) Business Days of the Closing Date.

g. Upon written request of a Buyer, the Company shall have delivered to such Buyer a secretary's certificate, dated as of the Closing Date, certifying as to (A) the Resolutions, (B) the charter of the Company, certified as of a date within five (5) Business Days of the Closing Date, by the Secretary of State of the State of Delaware, and (C) the by-laws of the Company.

h. The Company shall have delivered to such Buyer a Lock-Up Agreement, substantially in the form of Exhibit B hereto (the "**Lock-Up Agreement**") executed by each person listed on Exhibit C hereto, and each such Lock-Up Agreement shall be in full force and effect on the Closing Date.

i. The Company shall have obtained enforceable waivers (or other modification) in respect of the preemptive rights, participation rights or other similar rights in respect of the purchase and sale of the Securities hereunder.

j. The Company shall have made or obtained all filings, qualifications, permits and approvals under all applicable federal and state securities laws necessary to consummate the issuance of the Securities pursuant to this Agreement in compliance with such laws.

k. The Nasdaq Global Select Market shall not have notified the Company of any objections to the LAS submitted by the Company with respect to the Shares.

l. During the period beginning on the date of this Agreement and ending immediately prior to the Closing, there shall not have been any stock dividend, stock split, stock combination, recapitalization or other similar transaction with respect to any capital stock of the Company, including the Common Stock.

m. Neither the SEC nor the Principal Market shall have issued a stop order with respect to the Common Stock, nor shall the SEC or the Principal Market have threatened in writing to suspend trading of the Common Stock.

n. Since the date hereof, no event or series of events shall have occurred that has had or would reasonably be expected to have a Material Adverse Effect.

o. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

p. The Company and its Subsidiaries shall have delivered to such Buyer such other documents relating to the transactions contemplated by this Agreement as such Buyer or its counsel may reasonably request.

7. GOVERNING LAW; MISCELLANEOUS.

a. Governing Law; Jurisdiction; Jury Trial. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the courts of New York for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees

that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

b. Counterparts; Execution. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signatures complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

c. Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

d. Severability. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

e. Entire Agreement; Amendments; Waivers. This Agreement supersedes all other prior oral or written agreements among each Buyer, the Company and its Subsidiaries, their affiliates and Persons acting on their behalf with respect to the matters discussed herein, and this Agreement and the instruments referenced herein contain the entire understanding of the parties hereto with respect to the matters covered herein and therein. No provision of this Agreement may be waived, modified, supplemented or amended other than by an instrument in writing signed by the Company and by each of the Buyers (in either case, the "**Required Buyers**"). Any such amendment shall bind all holders of the Securities. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Securities then outstanding. No failure or delay on the part of a party in either exercising or enforcing any right under this Agreement shall operate as a waiver of, or impair, any such right. No single or partial exercise or enforcement of any such right shall preclude any other or further exercise or enforcement thereof or the exercise or enforcement of any other right. No waiver of any such right shall be deemed a waiver of any other right. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification or supplement of any provision of any of the Transaction Documents unless the same consideration also is offered to all of the parties hereto or to the other Transaction Documents or holders of the Securities, as the case may be. For clarification purposes, this provision constitutes a separate right granted to each Buyer and is not intended for the Company to treat the Buyers as a class and shall not be construed in any way as the Buyers acting in concert or otherwise as a group with respect to the purchase, disposition or voting of securities or otherwise.

f. Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered upon receipt, or when delivered if sent by email, if delivered personally or

if delivered by a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company:

Frequency Therapeutics, Inc.
19 Presidential Way, 2nd Floor
Woburn, Massachusetts 01801
[XXX]
Attention: Chief Executive Officer
Email: [XXX]

With copy to:

Latham & Watkins LLP
200 Clarendon Street, 27th Floor
Boston, Massachusetts 02116
[XXX]
Attention: John Chory; Nathan Ajiashvili
Email: [XXX]

If to a Buyer, to it at the contact information set forth under such Buyer's name on its signature page hereto, or, in the case of a Buyer or any other party named above, at such other contact information and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication; (B) provided by affidavit of personal delivery by a delivery service selected by the Company; or (C) provided by a nationally recognized overnight delivery service shall be rebuttable evidence of personal service or deposit with a nationally recognized overnight delivery service.

g. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, including any purchasers of the Securities. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Required Buyers. A Buyer may assign some or all of its rights hereunder without the consent of the Company; *provided*, *however*, that any such assignment shall not release such Buyer from its obligations hereunder unless such obligations are assumed by such assignee and the Company has consented to such assignment and assumption, which consent shall not be unreasonably withheld.

h. No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except that the Placement Agent is the intended third-party beneficiary of Sections 2 and 3 hereof and shall be permitted to rely on the legal opinion identified in Section 6.c hereof.

i. Survival. Unless this Agreement is terminated under Section 7.k, the representations and warranties of the Company and the Buyers contained in Sections 2 and 3, and the agreements and covenants set forth in Section 4 and this Section 7 shall survive the Closing. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

j. Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

k. Termination. In the event that the Closing shall not have occurred with respect to a Buyer on or before the fifth (5th) Business Day following the date of this Agreement due to the Company's or such Buyer's failure to satisfy the conditions set forth in Sections 5 and 6 above (and the nonbreaching party's failure to waive such unsatisfied condition(s)), the nonbreaching party shall have the option to terminate this Agreement with respect to such breaching party at the close of business on such date without liability of any party to any other party.

l. Placement Agent. The Company shall be responsible for the payment of any placement agent's fees or broker's commissions relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold each of the Buyers harmless against, any liability, loss or expense (including attorneys' fees and out-of-pocket expenses) arising in connection with any claim for any such payment.

m. No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties thereto express their mutual intent, and no rules of strict construction will be applied against any party.

n. Remedies. The parties hereto agree that (i) irreparable harm would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached, and (ii) money damages or other legal remedies would not be an adequate remedy for any such harm. Each Buyer and each holder of the Securities shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies that such Buyers and holders have been granted at any time under any other agreement or contract and all of the rights that such Buyers and holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security or proving actual damages), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law.

o. Payment Set Aside. To the extent that the Company makes a payment or payments to any Buyer pursuant to any Transaction Document or a Buyer enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the

Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

p. Independent Nature of Buyers. The obligations of each Buyer hereunder are several and not joint with the obligations of any other Buyer, and no Buyer shall be responsible in any way for the performance of the obligations of any other Buyer hereunder. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder. The decision of each Buyer to purchase the Securities pursuant to this Agreement has been made by such Buyer independently of any other Buyer and independently of any information, materials, statements or opinions as to the business, affairs, operations, assets, properties, liabilities, results of operations, condition (financial or otherwise) or prospects of the Company or any of its Subsidiaries which may have been made or given by any other Buyer or by any agent or employee of any other Buyer, and no Buyer or any of its agents or employees shall have any liability to any other Buyer (or any other Person or entity) relating to or arising from any such information, materials, statements or opinions. Nothing contained herein, and no action taken by any Buyer pursuant hereto or thereto (including a Buyer's purchase of Securities at the Closing at the same time as any other Buyer or Buyers), shall be deemed to constitute the Buyers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Buyers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated hereby. Each Buyer shall be entitled to independently protect and enforce its rights, including the rights arising out of this Agreement and the other Transaction Documents, and it shall not be necessary for any other Buyer to be joined as an additional party in any proceeding for such purpose. Each Buyer has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. For reasons of administrative convenience only, Buyers and their respective counsels may choose to communicate with the Company through White & Case LLP ("**White & Case**"), counsel to the Placement Agent. Each Buyer acknowledges that White & Case has rendered legal advice to the Placement Agent and not to such Buyer in connection with the transactions contemplated hereby, and that each such Buyer has relied for such matters on the advice of its own respective counsel. The Company has elected to provide all Buyers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any Buyer.

q. Interpretative Matters. Unless the context otherwise requires, (i) all references to Sections, Schedules or Exhibits are to Sections, Schedules or Exhibits contained in or attached to this Agreement, (ii) each accounting term not otherwise defined in this Agreement has the meaning assigned to it in accordance with GAAP, (iii) words in the singular or plural include the singular and plural and pronouns stated in either the masculine, the feminine or neuter gender shall include the masculine, feminine and neuter, (iv) the use of the word "including" in this Agreement shall be by way of example rather than limitation, and (v) the word "or" shall not be exclusive. All statements as to factual matters contained in any certificate or other instrument delivered by or on behalf of the Company pursuant to this Agreement or any of the other Transaction Documents in connection with the transactions contemplated hereby or thereby shall be deemed to be representations and warranties by the Company, as if made by the Company pursuant to Section 3 hereof, as of the date of such certificate or instrument.

* * * * * *

IN WITNESS WHEREOF, the parties have caused this Securities Purchase Agreement to be duly executed as of the date first above written.

COMPANY:

FREQUENCY THERAPEUTICS, INC.

By: /s/ David L. Lucchino
Name: David L. Lucchino
Title: Chief Executive Officer

BUYER:

WASATCH FUNDS TRUST
for Wasatch Small Cap Growth Fund
for Wasatch Ultra Growth Fund
for Wasatch Micro Cap Fund
for Wasatch Micro Cap Value Fund

By: Wasatch Advisors, Inc.
Its: Investment Adviser

By: /s/ Daniel Thurber
Name: Daniel Thurber
Its: Vice President

Address for Notice:
505 Wakara Way, 3rd Floor
Salt Lake City, UT 84108
Attn: Sarah Brown/Dan Thurber
Phone: [XXX]
Fax: [XXX]

Email: [XXX]

BUYER:

FEDERATED HERMES KAUFMANN FUND, A PORTFOLIO OF FEDERATED HERMES EQUITY FUNDS

By: Federated Global Investment Management Corp.
Its: Attorney-in-Fact

By: /s/ Stephen Van Meter
Name: Stephen Van Meter
Title: Vice President and Chief Compliance Officer

Address for Notice:
4000 Ericsson Drive
Warrendale, Pennsylvania 15086-7561
Attn: Christine Zorovich

Email: [XXX]

FEDERATED HERMES KAUFMANN SMALL CAP FUND, A PORTFOLIO OF FEDERATED HERMES EQUITY FUNDS

By: Federated Global Investment Management Corp.
Its: Attorney-in-Fact

By: /s/ Stephen Van Meter
Name: Stephen Van Meter
Title: Vice President and Chief Compliance Officer

Address for Notice:
4000 Ericsson Drive
Warrendale, Pennsylvania 15086-7561
Attn: Christine Zorovich

Email: [XXX]

BUYER:

FEDERATED HERMES KAUFMANN FUND II, A PORTFOLIO OF FEDERATED HERMES INSURANCE SERIES

By: Federated Global Investment Management Corp.
Its: Attorney-in-Fact

By: /s/ Stephen Van Meter
Name: Stephen Van Meter
Title: Vice President and Chief Compliance Officer

Address for Notice:
4000 Ericsson Drive
Warrendale, Pennsylvania 15086-7561
Attn: Christine Zorovich

Email: [XXX]

BUYER:

RTW MASTER FUND, LTD.

By: /s/ Roderick Wong, M.D.
Name: Roderick Wong, M.D.
Title: Director

Address for Notice:
c/o RTW Investments, LP
40 10th Avenue, Floor 7
New York, NY 10014

Email: [XXX]

RTW INNOVATION MASTER FUND, LTD.

By: /s/ Roderick Wong, M.D.
Name: Roderick Wong, M.D.
Title: Director

Address for Notice:
c/o RTW Investments, LP
40 10th Avenue, Floor 7
New York, NY 10014

Email: [XXX]

BUYER:

RTW VENTURE FUND LIMITED

By: /s/ Roderick Wong, M.D.
Name: Roderick Wong, M.D.
Title: Managing Partner

Address for Notice:

c/o RTW Investments, LP
40 10th Avenue, Floor 7
New York, NY 10014

Email: [XXX]

BUYER:

PERCEPTIVE LIFE SCIENCES MASTER FUND LTD

By: /s/ James H. Mannix
Name: James H. Mannix
Title: C.O.O

Address for Notice:
Perceptive Life Sciences Master Fund LTD
51 Astor Place 10TH floor
New York NY 10003

Email: [XXX]

BUYER:

G & E DUBIN FAMILY FOUNDATION

By: /s/ Glenn Dubin
Name: Glenn Dubin
Title: Trustee

Address for Notice:
[XXX]

Email:

BUYER:

DRIEHAUS LIFE SCIENCES MASTER FUND, L.P.

By: Driehaus Capital Management (USVI) LLC
Its: General Partner

By: /s/ Janet McWilliams
Name: Janet McWilliams
Title: Senior Vice President

Address for Notice:
Driehaus Capital Management LLC
Attn: General Counsel
25 E. Erie
Chicago, IL 60611

Email: [XXX]

BUYER:

MAVEN INVESTMENT PARTNERS US LTD – NEW YORK BRANCH

By: /s/ Ian Toon
Name: Ian Toon
Title: Director

Address for Notice:
675 3rd Ave, 15th Floor
New York, NY 10017

Email: [XXX]

BUYER:

ALEXANDRIA VENTURE INVESTMENTS, LLC

By: Alexandria Real Estate Equities, Inc.
Its: Managing Partner

By: /s/ Aaron Jacobson
Name: Aaron Jacobson
Title: SVP – Venture Counsel

Address for Notice:
26 North Euclid Ave
Pasadena, CA 91101

Email: [XXX]

BUYER:

ALAIN J. COHEN REVOCABLE TRUST

By: /s/ Alain J. Cohen
Name: Alain J. Cohen
Title: Trustee

Address for Notice:
[XXX]

Email: [XXX]

BUYER:

667, L.P

By: BAKER BROS. ADVISORS LP, management company and investment adviser to 667, L.P., pursuant to authority granted to it by Baker Biotech Capital, L.P., general partner to 667, L.P., and not as the general partner.

By: /s/ Scott Lessing
Name: Scott Lessing
Title: President

BAKER BROTHERS LIFE SCIENCES, L.P.

By: BAKER BROS. ADVISORS LP, management company and investment adviser to **Baker Brothers Life Sciences, L.P**., pursuant to authority granted to it by Baker Brothers Life Sciences Capital, L.P., general partner to Baker Brothers Life Sciences, L.P., and not as the general partner.

By: /s/ Scott Lessing
Name: Scott Lessing
Title: President

Address for Notice:
860 Washington Street
3rd Floor, New York, NY 10004

Email: [XXX]

Schedule A

Buyer's Name	Number of Shares To Be Purchased
Wasatch Small Cap Growth Fund	438,000
Wasatch Ultra Growth Fund	280,000
Wasatch Micro Cap Fund	155,000
Wasatch Micro Cap Value Fund	66,000
Federated Hermes Kaufmann Fund, a portfolio of Federated Hermes Equity Funds	205,800
Federated Hermes Kaufmann Small Cap Fund, a portfolio of Federated Hermes Equity Funds	178,000
Federated Hermes Kaufmann Fund II, a Portfolio of Federated Hermes Insurance Series	5,088
RTW Master Fund, Ltd.	196,448
RTW Innovation Master Fund, Ltd.	87,344
RTW Venture Fund Limited	16,208
Perceptive Life Sciences Master Fund LTD	222,222
G & E Dubin Family Foundation	111,111
Driehaus Life Sciences Master Fund, L.P.	111,111
Maven Investment Partners US Ltd – New York Branch	111,111
Alexandria Venture Investments, LLC	55,555
Alain J. Cohen Revocable Trust	55,555
Baker Brothers Life Sciences, L.P.	51,795
667, L.P	3,760

Exhibit A

Registration Rights Agreement

Exhibit B

The Lock-Up Agreement

Exhibit C

List of Persons Signing Lock-Up Agreements

Directors:

Marc A. Cohen
David L. Lucchino
Michael Huang
Joel S. Marcus
Timothy J. Barberich
Robert S. Langer

Executive Officers:

David L. Lucchino
Christopher R. Loose
Dana Hilt
Carl P. LeBel
Wendy S. Arnold
Richard Mitrano

Affiliates:

The Marc Andrew Cohen Revocable Trust
The Carey/Mitrano Family Trust
The Michael D. Langer 2014 Trust dtd 12/15/2014
The Samuel K. Langer 2014 Trust dtd 12/15/2014
The Susan K. Langer 2014 Trust dtd 12/15/2014

Execution Version

REGISTRATION RIGHTS AGREEMENT

This **REGISTRATION RIGHTS AGREEMENT** (this "**Agreement**"), dated as of July 17, 2020, by and among Frequency Therapeutics, Inc., a Delaware corporation, with principal office located at 19 Presidential Way, 2nd Floor, Woburn, MA 01801 (the "**Company**") and the undersigned buyers (each, a "**Buyer**" and, collectively, the "**Buyers**").

WHEREAS:

A. Pursuant to the Securities Purchase Agreement by and among the parties hereto of even date herewith (the "**Securities Purchase Agreement**"), the Company has agreed, upon the terms and subject to the conditions of the Securities Purchase Agreement, to issue and sell to the Buyers at the Closing (as defined in the Securities Purchase Agreement) the number of shares of the Company's common stock, par value $0.001 per share (the "**Common Stock**"), set forth on Schedule A to the Securities Purchase Agreement (the "**Shares**").

B. To induce the Buyers to purchase the Shares pursuant to the Securities Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, or any similar successor statutes and the rules and regulations thereunder (collectively, the "**1933 Act**").

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each of the Buyers hereby agree as follows:

1. DEFINITIONS. As used in this Agreement, the following terms shall have the following meanings:

a. "**1934 Act**" means, collectively, the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, or any similar successor statutes.

b. "**Affiliate**" means, as to any specified Person, (i) any Person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the specified Person, (ii) any executive officer, director, trustee or general partner of the specified Person and (iii) any legal entity for which the specified Person acts as an executive officer, director, trustee or general partner. For purposes of this definition, "control" (including the correlative meanings of the terms "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly, or indirectly through one or more intermediaries, of the power to direct or cause the direction of the management and policies of such Person, whether by contract, through the ownership of voting securities, partnership interests or other equity interests or otherwise.

c. "**Business Day**" means any day other than Saturday, Sunday or any other day on which commercial banks in the City of New York are authorized or required by law to remain closed.

d. "**Closing Date**" means the date of the issuance of the Shares pursuant to the Securities Purchase Agreement.

e. "**Cutback Effectiveness Date**" means the date a Cutback Registration Statement is declared effective by the SEC.

f. "**Cutback Effectiveness Deadline**" means, as to a Cutback Registration Statement, ninety (90) days following the filing of such Cutback Registration Statement unless the Required Holders agree in writing to extend such deadline at the Company's request.

g. "**Cutback Filing Deadline**" means, if Cutback Shares are required to be included in a Cutback Registration Statement, the date that is the earlier of (i) the later of (A) six (6) months from the Initial Effectiveness Date or the then-most recent Cutback Effectiveness Date, as applicable, and (B) sixty (60) days after the Company has been informed that substantially all of the Registrable Securities held by the Investors included in any Registration Statements previously declared effective hereunder have been sold in accordance therewith, or (ii) sixty (60) days from the first date on which the Company is then permitted by the SEC to register such Cutback Shares.

h. "**Cutback Registrable Securities**" means, (i) any Cutback Shares not previously included in a Registration Statement, and (ii) any shares of capital stock of the Company (or any successor or assign of the Company, whether by merger, reorganization, consolidation, sale of assets or otherwise) which may be issued or issuable with respect to, in exchange for, or in substitution of the Cutback Shares, as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise; *provided*, *however*, that any Cutback Registrable Securities shall cease to be Cutback Registrable Securities when (a) a Registration Statement with respect to the sale of such securities has become effective under the 1933 Act and such securities are disposed of in accordance with such Registration Statement, or (b) such securities are sold in accordance with Rule 144, or (c) all of such securities are eligible to be sold by the holder thereof pursuant to Rule 144 without limitation, restriction or condition (including any current public information requirement) thereunder, or (d) when such securities are sold to the Company.

i. "**Cutback Registration Statement**" means a registration statement or registration statements of the Company filed under the 1933 Act covering any Cutback Registrable Securities (which shall include, at any particular time, each document incorporated or deemed to be incorporated by reference therein).

j. "**Cutback Required Registration Amount**" means the lesser of (i) any Cutback Shares not previously included in a Registration Statement, and (ii) such number of Registrable Securities as the Company is then permitted by the SEC to register pursuant to Rule 415.

k. "**Cutback Shares**" means, at any time on or after the Initial Effectiveness Date, any of the Registrable Securities not included in all Registration Statements previously declared effective hereunder as a result of a limitation on the maximum number of shares of Common Stock permitted by the SEC to be registered pursuant to Rule 415.

l. "**Effectiveness Deadline**" means the Initial Effectiveness Deadline, a Cutback Effectiveness Deadline or a Subsequent Effectiveness Deadline, as applicable.

m. "**Filing Deadline**" means the Initial Filing Deadline, a Cutback Filing Deadline or a Subsequent Filing Deadline, as applicable.

n. "**Governmental Authority**" means the government of the United States of America or the government of any other nation, or any political subdivision thereof, whether state, provincial or local, or any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administration powers or functions of or pertaining to government over the Company or any of its subsidiaries, or any of their respective properties, assets or undertakings.

o. "**Initial Effectiveness Date**" means the date the Initial Registration Statement is declared effective by the SEC.

p. "**Initial Effectiveness Deadline**" means the date that is sixty (60) days after the Initial Filing Date unless the Required Holders agree in writing to extend such deadline at the Company's request.

q. "**Initial Filing Date**" means the date on which the Initial Registration Statement is filed with the SEC.

r. "**Initial Filing Deadline**" means the date that is sixty (60) days after the Closing Date.

s. "**Initial Registration Statement**" means a Registration Statement or Registration Statements filed under the 1933 Act pursuant to Section 2(a) hereof covering the Registrable Securities (which shall include, at any particular time, each document incorporated or deemed to be incorporated by reference therein).

t. "**Initial Required Registration Amount**" means the lesser of (i) 100% of the Registrable Securities as of the trading day immediately preceding the applicable date of determination, or (ii) such maximum number of Registrable Securities as the Company is then permitted to register by the SEC.

u. "**Investor**" means a Buyer or any transferee or assignee thereof to whom a Buyer assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 and such a transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9.

v. "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, a government or any department or agency thereof, or any other legal entity.

w. "**Prospectus**" means the prospectus included in any Registration Statement (as defined below), including any preliminary prospectus, and all other amendments and supplements to any such prospectus, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference, if any, in such prospectus.

x. "**Register,**" "registered," and "registration" refer to a registration effected by preparing and filing one or more Registration Statements in compliance with the 1933 Act and pursuant to Rule 415 and the declaration or ordering of effectiveness of such Registration Statement(s) by the SEC.

y. "**Registrable Securities**" means (i) the Shares; and (ii) any shares of capital stock of the Company (or any successor or assign of the Company, whether by merger, reorganization, consolidation, sale of assets or otherwise) which may be issued or issuable with respect to, in exchange for, or upon the exercise or conversion of the Shares, as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise; *provided*, *however*, that any Registrable Securities shall cease to be Registrable Securities when (a) a Registration Statement with respect to the sale of such securities has become effective under the 1933 Act and such securities are disposed of in accordance with such Registration Statement, (b) such securities are sold in accordance with Rule 144 or an applicable exemption from registration under the 1933 Act, (c) all of such securities are eligible to be sold by the holder thereof pursuant to Rule 144 without limitation, restriction or condition (including any current public information requirement) thereunder, or (d) when such securities are sold to the Company.

z. "**Registration Statement**" means a registration statement or registration statements of the Company filed under the 1933 Act covering Registrable Securities and the resale thereof (which shall include, at any particular time, each document incorporated or deemed to be incorporated by reference therein).

aa. "**Required Holders**" means the holders of a majority of the Registrable Securities.

bb. "**Rule 144**" means Rule 144 under the 1933 Act or any successor rule.

cc. "**Rule 415**" means Rule 415 under the 1933 Act or any successor rule providing for offering securities on a continuous or delayed basis.

dd. "**SEC**" means the United States Securities and Exchange Commission.

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Securities Purchase Agreement.

2. REGISTRATION.

a. Initial Mandatory Registration. The Company shall prepare, and, as soon as reasonably practicable, but in no event later than the Initial Filing Deadline, file with the SEC a Registration Statement covering the resale of the Registrable Securities for an offering to be made on a continuous basis pursuant to Rule 415 or, if Rule 415 is not available for offers and sales of the Registrable Securities, by such other means of distribution of Registrable Securities as the Investors may reasonably specify, in respect of which the Company may use a registration statement on Form S-3 (or any successor short form registration statement available for such resale that permits incorporation by reference at least to the same extent as such form) or, if a registration statement on Form S-3 is not then available to the Company, on such form of registration statement as is then available to effect a registration for resale of the Registrable Securities. The Initial Registration Statement prepared pursuant hereto shall register for resale at least the number of Registrable Securities equal to the Initial Required Registration Amount determined as of the date the Initial Registration Statement is initially filed with the SEC (subject to subsequent reduction if

directed by the staff of the SEC). The Company shall use best efforts to have the Initial Registration Statement declared effective by the SEC as soon as reasonably practicable, but in no event later than the Initial Effectiveness Deadline and shall use commercially reasonable efforts to have the Initial Registration Statement remain continuously effective under the 1933 Act until such date on which there are no longer any Registrable Securities covered by such Initial Registration Statement.

b. Cutback Mandatory Registrations. The Company shall prepare, and, as soon as reasonably practicable, but in no event later than each Cutback Filing Deadline, file with the SEC a Cutback Registration Statement on Form S-3 (or any successor short form registration statement available for such resale that permits incorporation by reference at least to the same extent as such form) or, if a registration statement on Form S-3 is not then available to the Company, on such form of registration statement as is then available to effect a registration for resale of the Registrable Securities covering the resale of the number of Cutback Registrable Securities equal to the Cutback Required Registration Amount. To the extent the staff of the SEC does not permit all of the Cutback Registrable Securities to be registered on a Cutback Registration Statement, the Company shall file Cutback Registration Statements successively trying to register on each such Cutback Registration Statement the maximum number of remaining Cutback Registrable Securities until all of the Cutback Registrable Securities have been registered with the SEC. Each Cutback Registration Statement prepared pursuant hereto shall register for resale at least that number of shares of Common Stock equal to the Cutback Required Registration Amount as of the date such Cutback Registration Statement is initially filed with the SEC. The Company shall use best efforts to have each Cutback Registration Statement declared effective by the SEC as soon as reasonably practicable, but in no event later than the Cutback Effectiveness Deadline and shall use commercially reasonable efforts to keep the Cutback Registration Statement continuously effective under the 1933 Act until such date on which there are no longer any Registrable Securities covered by such Cutback Registration Statement.

c. Allocation of Registrable Securities. The number of Registrable Securities included in any Registration Statement shall be allocated pro rata among the Investors based on the number of Registrable Securities held by each Investor that are to be included in such Registration Statement (without giving effect to any limitations imposed by the SEC). In the event that an Investor sells or otherwise transfers any of such Investor's Registrable Securities, each transferee shall be allocated a pro rata portion of the then remaining number of Registrable Securities included in such Registration Statement for such transferor. Any Registrable Securities included in a Registration Statement and which remain allocated to any Person that ceases to hold any Registrable Securities covered by such Registration Statement shall be allocated to the remaining Investors, pro rata based on the number of Registrable Securities then held by such Investors which are covered by such Registration Statement.

d. Legal Counsel. The Required Holders shall have the right to select one legal counsel to review and oversee any registration pursuant to this Section 2, which legal counsel shall be reasonably acceptable to the Company ("**Legal Counsel**"). The Company shall reasonably cooperate with Legal Counsel in performing the Company's obligations under this Agreement, including providing Legal Counsel at least two (2) business days to review the Registration Statement and any amendment thereto in advance of making any such filing. Notwithstanding Section 5, the Company shall pay the documented fees and expenses of Legal Counsel in connection with any registration pursuant to this Section 2, in an amount not to exceed $25,000.

e. Ineligibility for Form S-3. In the event that Form S-3 is not available for the registration of the resale of any Registrable Securities hereunder, the Company shall provide that any Registration Statement on Form S-1 filed hereunder shall incorporate documents by reference to the maximum extent possible.

f. Sufficient Number of Shares Registered. In the event the number of shares available under a Registration Statement filed pursuant to Section 2(a) or Section 2(b) is insufficient to cover all of the Registrable Securities required to be covered by such Registration Statement or an Investor's allocated portion of the Registrable Securities pursuant to Section 2(c), the Company shall promptly inform each Investor whose Registrable Securities are not fully covered by such Registration Statement and, as soon as reasonably practicable, but in any event (other than with respect to Cutback Shares) not later than twenty (20) days after the necessity therefor arises, or (if later) the first date on which the Company is then permitted to file such Registration Statement by the SEC (a "**Subsequent Filing Deadline**") amend the applicable Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover Registrable Securities consisting of at least that number of shares of Common Stock equal to 100% of the number of Registrable Securities as of two (2) trading days immediately preceding the date of the filing of such amendment or new Registration Statement. The Company shall use best efforts to cause such amendment and/or new Registration Statement to become effective as soon as reasonably practicable following the filing thereof, but in any event (other than with respect to Cutback Shares) not later than sixty (60) days following the filing thereof (a "**Subsequent Effectiveness Deadline**") unless the Required Holders agree in writing to extend such deadline at the Company's request. For purposes of the foregoing provision, the number of shares available under a Registration Statement shall be deemed "insufficient to cover all of the Registrable Securities" if as of any date of determination, the number of shares of Common Stock available for resale under the Registration Statement is less than 100% of the number of Registrable Securities.

g. Effect of Failure to File and Obtain and Maintain Effectiveness of Registration Statement.

i. If (A) a Registration Statement covering Registrable Securities and required to be filed by the Company pursuant to Section 2(a), Section 2(b) or Section 2(f) of this Agreement is not (I) filed with the SEC on or before the applicable Filing Deadline (a "**Filing Failure**") or (II) declared effective by the SEC on or before the applicable Effectiveness Deadline (an "**Effectiveness Failure**") or (B) on any day after a Registration Statement has been declared effective by the SEC, sales of all the Registrable Securities required to be included on such Registration Statement cannot be made (other than during an Allowable Grace Period (as defined in Section 3(n)(iv)) pursuant to such Registration Statement (including because of a failure to keep such Registration Statement effective, to disclose such information as is necessary for sales to be made pursuant to such Registration Statement or to comply with Section 2(f)) (a "**Maintenance Failure,**" and each of a Filing Failure, an Effectiveness Failure and a Maintenance Failure being referred to as a "**Registration Default**"), then the Company shall pay, as partial liquidated damages (but not as a penalty) to any holder of Shares by reason of any such delay in or reduction

of its ability to sell its Shares (which remedy shall not be exclusive of any other remedies available at law or in equity), an amount in cash equal to one percent (1.0%) of the aggregate purchase price paid pursuant to the Securities Purchase Agreement for such holder's Registrable Securities required to be included in such Registration Statement on each of the following dates: (1) the initial day of a Filing Failure and on every thirtieth (30th) day (prorated for periods totaling less than thirty (30) days) following the Filing Failure until such Filing Failure is cured; (2) the initial day of an Effectiveness Failure and on every thirtieth (30th) day (prorated for periods totaling less than thirty (30) days) following the Effectiveness Failure until such Effectiveness Failure is cured; and (3) the initial day of a Maintenance Failure and on every thirtieth (30th) day (prorated for periods totaling less than thirty (30) days) following the Maintenance Failure until such Maintenance Failure is cured.

ii. The payments to which a holder shall be entitled pursuant to this Section 2(g) are referred to herein as "**Registration Delay Payments.**" Registration Delay Payments shall be paid on the earlier of (i) the last day of the calendar month during which such Registration Delay Payments are incurred and (ii) the third Business Day after the event or failure giving rise to the Registration Delay Payments is cured. In the event the Company fails to make Registration Delay Payments in a timely manner, such Registration Delay Payments shall bear interest at the rate of one percent (1.0%) per month (on a 30/360 basis). Notwithstanding any provision herein or in the Securities Purchase Agreement, in no event shall the aggregate amount of Registration Delay Payments (or interest thereon) paid hereunder exceed, in the aggregate, 6% of the aggregate purchase price of the Shares purchased by the Buyers under the Securities Purchase Agreement.

iii. A Registration Default shall be deemed not to have occurred and be continuing, and no Registration Delay Payments shall accrue as a result thereof, in relation to a Registration Statement if (i) the Registration Default has occurred solely as a result of any information supplied or failed to be supplied by an Investor to the Company expressly for use in connection with the preparation of such Registration Statement or (ii) such Registration Default has occurred solely as a result of material events with respect to the Company that would need to be described in such Registration Statement or the related Prospectus and the Company is proceeding promptly and in good faith to amend or supplement the Registration Statement to describe such events as required by Section 3(n); *provided*, *however*, that if such Registration Default pursuant to (ii) continues for a period in excess of forty-five (45) days beyond any permitted forty-five (45) or ninety (90) day suspension period (as provided by Section 3(n)), Registration Delay Payments shall be payable in accordance with this Section 2(g) from the day such Registration Default occurred until such Registration Default is cured.

3. RELATED OBLIGATIONS. At such time as the Company is obligated to file a Registration Statement with the SEC pursuant to Section 2(a), Section 2(b) or Section 2(f), the Company will use reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

a. The Company shall promptly prepare and file with the SEC a Registration Statement with respect to the applicable Registrable Securities (but in no event later than the applicable Filing Deadline) and use reasonable best efforts to cause such Registration Statement

relating to the Registrable Securities to become effective as soon as reasonably practicable after such filing (but in no event later than the applicable Effectiveness Deadline). The Company shall use commercially reasonable efforts to respond to written comments received from the SEC upon a review of a Registration Statement within fourteen (14) Business Days. Each Buyer shall have the right to review and comment or have their counsel review and comment on any written submission made to the staff of the SEC with respect to any disclosure specifically relating to such Buyer. No such written submission shall be made to the staff of the SEC containing disclosure relating to such Buyer to which such Buyer's counsel reasonably objects. If the Company is notified by the SEC that such Registration Statement will not be reviewed or will not be subject to further review and the effectiveness of such Registration Statement may be accelerated, the Company shall, subject to Section 3(c), file with the SEC a request for acceleration of effectiveness in accordance with Rule 461 promulgated under the 1933 Act within two (2) Business Days after the date that the Company is so notified by the SEC. The Company shall keep each Registration Statement effective pursuant to Rule 415 at all times until the earlier of (i) the date as of which all of the Investors may sell all of the Registrable Securities covered by such Registration Statement pursuant to Rule 144 or an applicable exemption from registration under the 1933 Act without limitation, restriction or condition (including any current public information requirement) thereunder, (ii) the date on which the Investors have sold all of the Registrable Securities covered by such Registration Statement in accordance with such Registration Statement or pursuant to Rule 144 and (iii) the date that all Registrable Securities have ceased to be Registrable Securities (the "**Registration Period**"). Such Registration Statement shall contain a "plan of distribution" section and a "selling stockholder" section, in each case approved by Legal Counsel and no Investor shall be named as an "underwriter" in the Registration Statement without such Investor's prior written consent, except that an Investor may be named as a "statutory underwriter" if such Investor is, or is affiliated with, a broker dealer and states such fact in writing to the Company. Such Registration Statement (including any amendments or supplements thereto and any Prospectuses (preliminary, final, summary or free writing)) contained therein or related thereto shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in the light of the circumstances in which they were made, not misleading.

b. The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement and the Prospectus used in connection with such Registration Statement, as may be necessary to keep such Registration Statement effective at all times during the Registration Period, and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the Company covered by such Registration Statement during the Registration Period. In the case of amendments and supplements to a Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 3(b)) by reason of the Company filing a report on Form 8-K, Form 10-Q, Form 10-K or any analogous report under the 1934 Act, the Company shall have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the SEC within two (2) Business Days after the 1934 Act report is filed which created the requirement for the Company to amend or supplement such Registration Statement. The Company shall promptly notify Legal Counsel of any request by the SEC or any other Governmental Authority, during the period of effectiveness of a Registration Statement, for amendments or supplements to such Registration Statement or related Prospectus or for additional information.

c. The Company shall, upon request, (A) permit Legal Counsel to review and comment upon (i) the Initial Registration Statement at least two (2) Business Days prior to its filing with the SEC, and (ii) all other Registration Statements and all amendments and supplements to all Registration Statements (except for annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K, and any similar or successor reports) within two (2) Business Days prior to their filing with the SEC, and (B) not file any document, registration statement, amendment or supplement described in the foregoing clause (A) in a form to which Legal Counsel reasonably objects. The Company shall provide Legal Counsel one (1) Business Day notice prior to submitting any request for acceleration of the effectiveness of a Registration Statement or any amendment or supplement thereto. The Company shall promptly furnish to Legal Counsel copies of any correspondence from the SEC to the Company or its representatives relating to any Registration Statement and shall provide Legal Counsel the opportunity to review and comment upon the Company's responses to any such correspondence. The Company shall reasonably cooperate with Legal Counsel in performing the Company's obligations pursuant to this Section 3.

d. The Company shall furnish to each Investor, upon request, without charge, such documents, including copies of any Prospectus (preliminary, final, summary or free writing), as such Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by such Investor.

e. The Company shall use best efforts to (i) register and qualify, unless an exemption from registration and qualification applies, the resale by the Investors of the Registrable Securities covered by a Registration Statement under the securities or applicable state blue sky or state securities laws ("**Blue Sky**") laws of all applicable jurisdictions in the United States, (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions or obtain exemptions from the registration and qualification requirements of such jurisdictions; *provided*, *however*, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(e), (y) subject itself to general taxation in any jurisdiction, or (z) file a general consent to service of process in any jurisdiction in which it is not currently so qualified or subject to general taxation or has not currently so consented. The Company shall promptly notify Legal Counsel of the receipt by the Company of any notification with respect to the suspension of the registration or qualification (or exemption from qualification) of any of the Registrable Securities for sale under the securities or Blue Sky laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

f. The Company shall notify Legal Counsel of the happening of any event, as promptly as reasonably practicable after becoming aware of such event, as a result of which, in the case of a Registration Statement, it includes an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading and, in the case of the Prospectus included in a Registration Statement, it includes an

untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading which information shall be accompanied by an instruction to suspend the use of the Registration Statement and the Prospectus until the requisite changes have been made (*provided* that in each notice the Company shall not disclose any material non-public information to any Investor), and, subject to Section 3(n), promptly prepare and file with the SEC a supplement or amendment to such Registration Statement to correct such untrue statement or omission, and deliver a copy of such supplement or amendment to Legal Counsel and each Investor (or such other number of copies as Legal Counsel or such Investor may reasonably request). The Company shall also promptly notify Legal Counsel and each Investor in writing (i) when a Prospectus or any Prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (promptly providing written notice of such effectiveness to each Investor), (ii) of any request by the SEC for amendments or supplements to a Registration Statement or related Prospectus or related information and (iii) of the Company's reasonable determination that a post-effective amendment to a Registration Statement would be appropriate.

g. The Company shall use commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement (other than during an Allowable Grace Period, as defined below), or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible time and to notify Legal Counsel of the issuance of such order or suspension and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

h. The Company shall hold in confidence and not make any disclosure of information concerning an Investor provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement. The Company agrees that it shall, upon learning that disclosure of such information concerning an Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to such Investor and allow such Investor, at the Investor's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

i. The Company shall use commercially reasonable efforts to cause all the Registrable Securities covered by a Registration Statement to be listed on each securities exchange or trading market on which securities of the same class or series issued by the Company are listed, and with the same CUSIP. For the avoidance of doubt, and subject to Section 5, the Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(i).

j. The Company shall cooperate with the Investors that hold Registrable Securities being offered and the underwriters, if any, and, to the extent applicable, facilitate the timely preparation and delivery of certificates (not bearing any restrictive legend) representing the

Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such names and denominations or amounts, as the case may be, and/or the timely issuance of the Registrable Securities to be offered pursuant to a Registration Statement through the Direct Registration System (DRS) of The Depository Trust Company (the "**DTC**") or crediting of the Registrable Securities to be offered pursuant to a Registration Statement to the applicable account (or accounts) with DTC through its Deposit/Withdrawal At Custodian (DWAC) system, in any such case as each Investor may reasonably request.

k. The Company shall provide a transfer agent and registrar for all such Registrable Securities not later than the effective date of the applicable Registration Statement.

l. If requested by an Investor, the Company shall (i) as soon as reasonably practicable, incorporate in a prospectus supplement or post-effective amendment such information as such Investor requests to be included therein relating to the sale and distribution of Registrable Securities, including information with respect to such Investor, the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) as soon as reasonably practicable, make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) as soon as reasonably practicable, supplement or amend any Registration Statement as reasonably requested by such Investor *provided*, *however*, that the Company will have no obligation to add Investors to the Initial Registration Statement or any subsequent Cutback Registration Statement as selling stockholders more frequently than one time per every forty-five (45) days.

m. The Company shall otherwise use best efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

n. Grace Period.

i. Notwithstanding anything to the contrary in Section 3(f), and subject to the provisions of this Section 3(n) and a good faith determination by the Company that it is in the best interests of the Company to suspend the use of any Registration Statement, following the effectiveness of such Registration Statement (and the filings with any federal or state securities commissions), the Company, by written notice to the Investors, may direct the Investors to suspend sales of the Registrable Securities pursuant to such Registration Statement for such times as the Company reasonably may determine is necessary and advisable (a "**Grace Period**"), if any of the following events shall occur (each, a "**Grace Period Event**"):

(1) there is material non-public information regarding the Company which (A) the Company determines not to be in the Company's best interest to disclose, (B) would, in the good faith determination of the Company, require any revisions to the Registration Statement so that it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (C) which the Company is not otherwise required to disclose;

(2) there is a significant *bona fide* business opportunity (including, but not limited to, the acquisition or disposition of assets (other than in the ordinary course of business), including any significant merger, consolidation, tender offer or other similar transaction) available to the Company which the Company determines not to be in the Company's best interest to disclose; or

(3) the Company is required to file a post-effective amendment to a Registration Statement to incorporate the Company's quarterly or annual reports or audited financial statements on Forms 10-Q and 10-K; *provided* that no Grace Period permitted pursuant to this clause (3) shall continue for more than five (5) consecutive Business Days.

ii. The Company shall (A) promptly provide written notice to the Investors of the occurrence giving rise to a Grace Period (*provided* that if such Grace Period occurs pursuant to Section 3(n)(i)(1) and 3(n)(i)(2), the Company shall not disclose the content of such material non-public information) and the date on which the Grace Period will begin (a "**Grace Period Notice**"), and (B) as soon as such date may be determined, promptly provide written notice to the Investors of the date on which the Grace Period ends (an "**End of Grace Period Notice**").

iii. Any Grace Period Notice shall state that such Grace Period shall continue only for so long as the Grace Period Event or its effect is continuing and that the Company is taking all reasonable steps to terminate suspension of the effectiveness of the Registration Statement as promptly as possible. The Investors shall not affect any sales of the Registrable Securities pursuant to such Registration Statement (or such filings) at any time after it has received a Grace Period Notice from the Company and prior to receipt of an End of Grace Period Notice. The Investors may recommence effecting sales of the Registrable Securities pursuant to the Registration Statement (or such filings) upon receipt of an End of Grace Period Notice from the Company, which notice shall be given by the Company promptly following the conclusion of any Grace Period Event.

iv. No Grace Period shall (A) exceed forty-five (45) consecutive days, (B) during any three hundred sixty-five (365) day period, exceed an aggregate of ninety (90) days, or (C) have its first day occur less than ten (10) trading days after the last day of any prior Grace Period (each Grace Period that satisfies all of the requirements of this Section 3(n)(iv) being referred to as an "**Allowable Grace Period**"). For purposes of determining the length of a Grace Period above, the Grace Period shall begin on and include the date the Investors receive a Grace Period Notice and shall end on and include the later of the date the Investors receive the End of Grace Period Notice and the date referred to in such notice. The provisions of Section 3(f) hereof shall not be applicable during the period of any Allowable Grace Period. Upon expiration of the Grace Period, the Company shall again be bound by the first sentence of Section 3(f) with respect to the information giving rise thereto unless such material non-public information is no longer applicable.

v. Upon the earlier to occur of (A) the Company delivering to the Investors an End of Grace Period Notice or (B) the end of the maximum permissible Grace Period, the Company shall use its commercially reasonable efforts to promptly amend or supplement the

Registration Statement on a post-effective basis, if necessary, or to take such action as is necessary to make resumed use of the Registration Statement compatible with the Company's best interests, as applicable, so as to permit the Investors to resume sales of the Registrable Securities as soon as possible.

o. The Company shall enter into such customary agreements (including, in the case of underwritten offering, an underwriting agreement) and take such other actions as any of the Investors or underwriters, if any, may reasonably request in order to expedite and facilitate the disposition of the Registrable Securities covered by a Registration Statement.

4. OBLIGATIONS OF THE INVESTORS.

a. At least five (5) Business Days prior to the first anticipated filing date of a Registration Statement and at least three (3) Business Days prior to the filing of any amendment or supplement to a Registration Statement, the Company shall notify each Investor in writing of the information, if any, the Company requires from each such Investor if such Investor elects to have any of such Investor's Registrable Securities included in such Registration Statement or, with respect to an amendment or a supplement, if such Investor's Registrable Securities are included in such Registration Statement (each an "**Information Request**"). Provided that the Company shall have complied with its obligations set forth in the preceding sentence, it shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that, at least three (3) Business Days prior to the anticipated filing date, such Investor shall furnish to the Company, in response to an Information Request, such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the registration of such Registrable Securities.

b. Each Investor, by such Investor's acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder, unless such Investor has notified the Company in writing of such Investor's election to exclude all of such Investor's Registrable Securities from such Registration Statement.

c. Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(f), Section 3(g), or Section 3(n), such Investor will discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until such Investor's receipt of the copies of the supplemented or amended Prospectus contemplated by Section 3(f) or receipt of notice from the Company in writing that no supplement or amendment is required or that the Allowable Grace Period has ended. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(f), Section 3(g) or Section 3(n) and for which the Investor has not yet settled; *provided*, that such sale complies with Rule 144 or another exemption under the 1933 Act.

5. EXPENSES OF REGISTRATION. All expenses, other than underwriting discounts and commissions, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including all registration, listing, and Blue Sky qualification fees, printers and accounting fees, and fees and disbursements of counsel for the Company, as well as all other costs and expenses incurred in connection with the Company's compliance with its obligations under this Agreement, shall be paid by the Company. Each Investor shall pay all fees and disbursements of its counsel and all underwriting discounts and commissions, broker or similar fees and transfer taxes, if any, relating to the sale or disposition of such Investor's Registrable Securities.

6. INDEMNIFICATION. In the event any Registrable Securities are included in a Registration Statement:

a. By the Company. To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend each Investor, their respective directors, officers, managers, employees and agents, and each Person, if any, who controls any Investor within the meaning of the 1933 Act or the 1934 Act (each, an "**Indemnified Person**"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable and documented attorneys' fees, amounts paid in settlement, joint or several, and any reasonable and documented expenses (collectively, "**Indemnified Damages**"), incurred in investigating, preparing or defending any action, claim, suit, proceeding, investigation or appeal taken from the foregoing by or before any court or Governmental Authority or other administrative or regulatory agency or body (including the SEC and any state commission or authority or self-regulatory organization or securities exchange in the United States or elsewhere), whether pending or threatened (each, a "**Claim**" and collectively, "**Claims**"), to which any of them may become subject insofar as such Claim (or actions or proceedings, whether commenced or threatened, in respect thereof) or Indemnified Damages arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other Blue Sky laws of any jurisdiction in which Registrable Securities are offered, or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements made therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any Prospectus, including any preliminary Prospectus, free writing Prospectus or final Prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto, and including all information incorporated by reference therein), or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in the light of the circumstances under which they were made, not misleading or (iii) any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to a Registration Statement (the matters in the foregoing clauses (i) through (iii) being, collectively, "**Violations**"). Subject to Section 6(c), the Company shall reimburse the Indemnified Persons, promptly as such expenses are incurred and are due and payable, for any reasonable and documented legal fees or other reasonable and documented expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (x) shall not apply to a Claim or Indemnified Damages sought by an Indemnified Person to the extent arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished to the Company by such Indemnified

Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto; and (y) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld, conditioned or delayed. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive any transfer of Registrable Securities by any Investor pursuant to Section 9.

b. By the Investors. In connection with any Registration Statement in which an Investor's Registrable Securities are included, each such Investor agrees to severally and not jointly indemnify, hold harmless and defend the Company, each of its directors, each of its officers who signs the Registration Statement, and each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act (each an "**Indemnified Party**"), to the same extent and in the same manner as is set forth in Section 6(a) with respect to the Indemnified Persons, against any Claim or Indemnified Damages to which any of them may become subject insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with information furnished to the Company by such Investor expressly for use in connection with the preparation of the Registration Statement or any amendment thereof or supplement thereto; and, subject to Section 6(c), such Investor will reimburse any reasonable and documented legal or other reasonable and documented expenses incurred by an Indemnified Party in connection with investigating or defending any such Claim; *provided*, *however*, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim or Indemnified Damages if such settlement is effected without the prior written consent of such Investor, which consent shall not be unreasonably withheld; *provided*, *further*, that an Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to the Registration Statement giving rise to such indemnification obligation. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive any transfer of Registrable Securities by any Investor pursuant to Section 9.

c. Notice. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of the written threat of or notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim or Indemnified Damages, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, promptly deliver to the indemnifying party a written notice of the written threat of or notice of the commencement of such action or proceeding; *provided* that failure to so notify the indemnifying party will not relieve the indemnifying party from any liability it may have to such indemnified party hereunder except to the extent that the indemnifying party is materially prejudiced by such failure. Such notice shall state the nature and the basis of such Claim to the extent then known. In case any such action or proceeding is brought against any Indemnified Party or Indemnified Person and such Indemnified Party or Indemnified Person seeks or intends to seek indemnity from an indemnifying party, the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified

Person or the Indemnified Party, as the case may be. In any such proceeding, any Indemnified Person or Indemnified Party may retain its own counsel, but the fees and expenses of that counsel will be at the expense of that Indemnified Person or Indemnified Party, as the case may be, unless (i) the indemnifying party and the Indemnified Person or Indemnified Party, as applicable, shall have mutually agreed to the retention of that counsel, (ii) the indemnifying party does not assume the defense of such proceeding in a timely manner or (iii) in the opinion of counsel retained by the Indemnified Person or Indemnified Party, as applicable, the representation by such counsel for the Indemnified Person or Indemnified Party, as applicable, and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by counsel to the indemnifying party in such proceeding. The Indemnified Party or Indemnified Person shall reasonably cooperate with the indemnifying party in connection with any negotiation or defense of any such action or proceeding or Claim or Indemnified Damages by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action, proceeding or Claim or Indemnified Damages. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall, without the prior written consent of the Indemnified Party or Indemnified Person, as the case may be, consent to entry of any judgment or enter into any settlement or other compromise with respect to any pending or threatened action or claim in respect of which indemnification or contribution may be or has been sought hereunder (whether or not the Indemnified Party or Indemnified Person is an actual or potential party to such action or claim) which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person (as applicable) of a full release from all liability with respect to such Claim or Indemnified Damages or which includes any admission as to fault or culpability on the part of such Indemnified Party or Indemnified Person. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action or proceeding shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is materially prejudiced in its ability to defend such action or proceeding as a result of such failure.

d. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred. The Indemnified Party or Indemnified Person shall promptly reimburse the indemnifying party for that portion of such fees and expenses applicable to such actions for which such Indemnified Party or Indemnified Person is finally judicially determined to not be entitled to indemnification hereunder.

e. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. CONTRIBUTION. To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; *provided*, *however*, that: (i) no Person involved in the sale of Registrable

Securities which Person is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) in connection with such sale shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and (ii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities pursuant to such Registration Statement, less the amount of any damages that such Investor has otherwise been required to pay in connection with such sale.

8. REPORTS UNDER THE 1934 ACT. With a view to making available to the Investors the benefits of Rule 144, the Company agrees to use commercially reasonable efforts to:

a. make and keep public information available, as those terms are understood and defined in Rule 144;

b. file with the SEC in a timely manner all reports and other documents required of the Company under the 1934 Act so long as the Company remains subject to such requirements (it being understood that nothing herein shall limit the Company's obligations under Section 4.c of the Securities Purchase Agreement) and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and

c. furnish to each Investor, unless otherwise available at no charge by access electronically to the SEC's Electronic Data Gathering, Analysis, and Retrieval system (or successor thereto), so long as such Investor owns Registrable Securities, promptly upon request, (i) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and (ii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

9. ASSIGNMENT OF REGISTRATION RIGHTS. The rights under this Agreement shall be automatically assignable by the Investors to any transferee of all or any portion of Registrable Securities if: (i) the Investor agrees in writing with the transferee or assignee to assign such rights, and a copy of such agreement is furnished to the Company; (ii) the Company is furnished with written notice within three (3) Business Days of (a) the name and address of such transferee or assignee, and (b) the securities with respect to which such registration rights are being transferred or assigned; (iii) immediately following such transfer or assignment the further disposition of such securities by the transferee or assignee is restricted under the 1933 Act and applicable state securities laws; (iv) the transferee or assignee agrees in writing with the Company to be bound by all of the provisions contained herein; and (v) the transferee is an "accredited investor," as that term is defined in Rule 501 of Regulation D.

10. AMENDMENT OF REGISTRATION RIGHTS. Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Required Holders; provided that any such amendment or waiver that complies with the foregoing but that disproportionately, materially and adversely affects the rights and obligations of any Investor relative to the comparable rights and obligations of the other Investors shall require the prior written consent of such adversely affected Investor (for the avoidance of doubt, participation by any Investor in an unrelated financing by the Company shall not be deemed to

disproportionately affect the Investors who do not participate in such financing). Any amendment or waiver effected in accordance with this Section 10 shall be binding upon each Investor and the Company. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Registrable Securities. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of this Agreement unless the same consideration also is offered to each of the Investors. Notwithstanding the foregoing, a waiver or consent to or departure from the provisions hereof with respect to a matter that relates exclusively to the rights of an Investor whose securities are being sold pursuant to a Registration Statement and that does not directly or indirectly affect, impair, limit or compromise the rights of other Investors may be given solely by such Investor.

11. MISCELLANEOUS.

a. A Person is deemed to be a holder of Registrable Securities (or a transferee or assignee of Registrable Securities, as applicable) whenever such Person owns or is deemed to own of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from the registered owner of such Registrable Securities.

b. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered upon receipt, or when delivered via email, personally or by a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company:

Frequency Therapeutics, Inc.
19 Presidential Way, 2nd Floor
Woburn, Massachusetts 01801
[XXX]
Attention: Chief Executive Officer
Email: [XXX]

With copy to:

Latham & Watkins LLP
200 Clarendon Street, 27th Floor
Boston, Massachusetts 02116
[XXX]
Attention: John Chory;
Nathan Ajiashvili
Email: [XXX]
[XXX]

c. If to an Investor, at the contact information set forth under such Investor's name on its signature page hereto, or, in the case of an Investor or any other party named above, at such other contact information and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.

d. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the courts of New York for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e. This Agreement and the other documents executed in contemplation thereof (the "**Transaction Documents**") constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement and the other Transaction Documents supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.

f. Subject to the requirements of Section 9, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto.

g. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

h. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signatures complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

i. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j. All consents and other determinations to be made by the Investors pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Required Holders. Any consent or other determination approved by Investors as provided in the immediately preceding sentence shall be binding on all Investors.

k. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

l. Each Buyer and each holder of the Registrable Securities shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies that such Buyers and holders have been granted at any time under any other agreement or contract and all of the rights that such Buyers and holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security or proving actual damages), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law.

m. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns and, to the extent provided in Sections 6 and 7 hereof, each Indemnified Person and Indemnified Party, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

n. From the date hereof, the Company shall not grant any Person any registration rights with respect to shares of Common Stock or any other securities of the Company other than registration rights that will not adversely affect the rights of the Investors hereunder (including by limiting in any way the number of Registrable Securities that could be included in any Registration Statement pursuant to Rule 415) and shall not otherwise enter into any agreement that is inconsistent with the rights granted to the Investors hereunder; *provided*, *however* that this provision shall not prohibit the Company from fulfilling its obligations under that certain Second Amended and Restated Investors' Rights Agreement, dated as of July 17, 2019, by and among the Company and the investors listed on Schedule A thereto.

o. The Company shall have no further obligations pursuant to this Agreement at the earlier of (i) such time as no Registrable Securities are outstanding and (ii) such time as the Registrable Securities covered by the Registration Statement that are not held by Affiliates of the Company are, as determined by the Company, eligible for resale pursuant to Rule 144 without limitation, restriction or condition (including any current public information requirement thereunder); *provided*, in each case, however, that the Company's obligations under Sections 5, 6, 7 and 11 of this Agreement shall remain in full force and effect following such time.

p. The obligations of each Investor hereunder are several and not joint with the obligations of any other Investor, and no provision of this Agreement is intended to confer any obligations on any Investor vis-à-vis any other Investor. Nothing contained herein, and no action taken by any Investor pursuant hereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated herein.

q. Unless the context otherwise requires, (a) all references to Sections, Schedules or Exhibits are to Sections, Schedules or Exhibits contained in or attached to this Agreement, (b) each accounting term not otherwise defined in this Agreement has the meaning assigned to it in accordance with GAAP, (c) words in the singular or plural include the singular and plural, and pronouns stated in either the masculine, the feminine or neuter gender shall include the masculine, feminine and neuter and (d) the use of the word “including” in this Agreement shall be by way of example rather than limitation.

IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of the date first above written.

COMPANY:

FREQUENCY THERAPEUTICS, INC.

By: /s/ David L. Lucchino
Name: David L. Lucchino
Title: Chief Executive Officer

BUYER:

WASATCH FUNDS TRUST
for Wasatch Small Cap Growth Fund
for Wasatch Ultra Growth Fund
for Wasatch Micro Cap Fund
for Wasatch Micro Cap Value Fund

By: Wasatch Advisors, Inc.
Its: Investment Adviser

By: /s/ Daniel Thurber
Name: Daniel Thurber
Its: Vice President

Address for Notice:
505 Wakara Way, 3rd Floor
Salt Lake City, UT 84108
Attn: Sarah Brown/Dan Thurber
Phone: [XXX]
Fax: [XXX]

Email: [XXX]

BUYER:

FEDERATED HERMES KAUFMANN FUND, A PORTFOLIO OF FEDERATED HERMES EQUITY FUNDS

By: Federated Global Investment Management Corp.
Its: Attorney-in-Fact

By: /s/ Stephen Van Meter
Name: Stephen Van Meter
Title: Vice President and Chief Compliance Officer

Address for Notice:
4000 Ericsson Drive
Warrendale, Pennsylvania 15086-7561
Attn: Christine Zorovich

Email: [XXX]

FEDERATED HERMES KAUFMANN SMALL CAP FUND, A PORTFOLIO OF FEDERATED HERMES EQUITY FUNDS

By: Federated Global Investment Management Corp.
Its: Attorney-in-Fact

By: /s/ Stephen Van Meter
Name: Stephen Van Meter
Title: Vice President and Chief Compliance Officer

Address for Notice:
4000 Ericsson Drive
Warrendale, Pennsylvania 15086-7561
Attn: Christine Zorovich

Email: [XXX]

BUYER:

FEDERATED HERMES KAUFMANN FUND II, A PORTFOLIO OF FEDERATED HERMES INSURANCE SERIES

By: Federated Global Investment Management Corp.
Its: Attorney-in-Fact

By: /s/ Stephen Van Meter
Name: Stephen Van Meter
Title: Vice President and Chief Compliance Officer

Address for Notice:
4000 Ericsson Drive
Warrendale, Pennsylvania 15086-7561
Attn: Christine Zorovich

Email: [XXX]

BUYER:

RTW MASTER FUND, LTD.

By: /s/ Roderick Wong, M.D.
Name: Roderick Wong, M.D.
Title: Director

Address for Notice:
c/o RTW Investments, LP
40 10th Avenue, Floor 7
New York, NY 10014

Email: [XXX]

RTW INNOVATION MASTER FUND, LTD.

By: /s/ Roderick Wong, M.D.
Name: Roderick Wong, M.D.
Title: Director

Address for Notice:
c/o RTW Investments, LP
40 10th Avenue, Floor 7
New York, NY 10014

Email: [XXX]

BUYER:

RTW VENTURE FUND LIMITED

By: /s/ Roderick Wong, M.D.
Name: Roderick Wong, M.D.
Title: Managing Partner

Address for Notice:

c/o RTW Investments, LP
40 10th Avenue, Floor 7
New York, NY 10014

Email: [XXX]

BUYER:

PERCEPTIVE LIFE SCIENCES MASTER FUND LTD

By: /s/ James H. Mannix
Name: James H. Mannix
Title: C.O.O

Address for Notice:
Perceptive Life Sciences Master Fund LTD
51 Astor Place 10TH floor
New York NY 10003

Email: [XXX]

BUYER:

G & E DUBIN FAMILY FOUNDATION

By: /s/ Glenn Dubin
Name: Glenn Dubin
Title: Trustee

Address for Notice:
[XXX]

Email:

BUYER:

DRIEHAUS LIFE SCIENCES MASTER FUND, L.P.

By: Driehaus Capital Management (USVI) LLC
Its: General Partner

By: /s/ Janet McWilliams
Name: Janet McWilliams
Title: Senior Vice President

Address for Notice:
Driehaus Capital Management LLC
Attn: General Counsel
25 E. Erie
Chicago, IL 60611

Email: [XXX]

BUYER:

MAVEN INVESTMENT PARTNERS US LTD – NEW YORK BRANCH

By: /s/ Ian Toon
Name: Ian Toon
Title: Director

Address for Notice:
675 3rd Ave, 15th Floor
New York, NY 10017

Email: [XXX]

BUYER:

ALEXANDRIA VENTURE INVESTMENTS, LLC

By: Alexandria Real Estate Equities, Inc.
Its: Managing Partner

By: /s/ Aaron Jacobson
Name: Aaron Jacobson
Title: SVP – Venture Counsel

Address for Notice:
26 North Euclid Ave
Pasadena, CA 91101

Email: [XXX]

BUYER:

ALAIN J. COHEN REVOCABLE TRUST

By: /s/ Alain J. Cohen
Name: Alain J. Cohen
Title: Trustee

Address for Notice:
[XXX]

Email: [XXX]

BUYER:

667, L.P

By: BAKER BROS. ADVISORS LP, management company and investment adviser to **667, L.P.**, pursuant to authority granted to it by Baker Biotech Capital, L.P., general partner to 667, L.P., and not as the general partner.

By: /s/ Scott Lessing
Name: Scott Lessing
Title: President

BAKER BROTHERS LIFE SCIENCES, L.P.

By: BAKER BROS. ADVISORS LP,
management company and investment adviser to **Baker Brothers Life Sciences, L.P**., pursuant to authority granted to it by Baker Brothers Life Sciences Capital, L.P., general partner to Baker Brothers Life Sciences, L.P., and not as the general partner.

By: /s/ Scott Lessing
Name: Scott Lessing
Title: President

Address for Notice:
860 Washington Street
3rd Floor, New York, NY 10004

Email: [XXX]