

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): **May 20, 2022**

VolitionRx Limited

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction
of Incorporation)

001-36833

(Commission File Number)

91-1949078

(IRS Employer
Identification Number)

**13215 Bee Cave Parkway
Suite 125, Galleria Oaks B
Austin, Texas 78738**

(Address of principal executive offices and Zip Code)

+1 (646) 650-1351

(Registrant's telephone number, including area code)

Not applicable

(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, par value \$0.001 per share	VNRX	NYSE American, LLC

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 May 20, 2022, VolitionRx Limited (the “Company”) entered into an Equity Distribution Agreement (the “2022 EDA”) with Jefferies LLC (the “Designated Agent”), pursuant to which the Company may, through the Designated Agent, offer and sell up to \$25 million in shares (the “Shares”) of its common stock, \$0.001 par value per share (the “Common Stock”). The Designated Agent may sell the Shares by any method deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended (the “Securities Act”), or in privately negotiated transactions.

The issuance and sale of the Shares by the Company under the 2022 EDA, if any, will be made pursuant to the Company’s registration statement on Form S-3 (File No. 333-259783), which was declared effective on November 8, 2021 (the “Registration Statement”), and offerings of the Shares will be made only by means of the Company’s prospectus supplement relating to the offering that forms part of the Registration Statement.

The Company is not obligated to sell any Shares under the 2022 EDA. Subject to the terms and conditions of the 2022 EDA, the Designated Agent will use its commercially reasonable efforts, consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the NYSE American, for the period specified in the placement notices delivered to the Designated Agent by the Company (each, a “Placement Notice”), to sell such Shares up to the amount specified by the Company in, and otherwise in accordance with the terms of, such Placement Notice.

The Company has agreed to pay the Designated Agent a commission of 3.0% of the aggregate gross proceeds from each sale of Shares that occur pursuant to the 2022 EDA, and has agreed to provide the Designated Agent with customary indemnification and contribution rights, including with respect to certain liabilities under the Securities Act.

The 2022 EDA replaces the Company’s prior Equity Distribution Agreement dated September 24, 2021 (the “2021 EDA”) that was terminated effective May 7, 2022, as disclosed in Item 5 of the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2022. No further sales of Common Stock will be made under the 2021 EDA.

The foregoing description of the material terms of the 2022 EDA does not purport to be complete and is qualified in its entirety by reference to the complete text of the 2022 EDA, a copy of which is filed herewith as Exhibit 1.1 and incorporated herein by reference.

The legal opinion of Stradling Yocca Carlson & Rauth, P.C., counsel to the Company, related to the Shares, is filed herewith as Exhibit 5.1.

This Current Report on Form 8-K shall not constitute an offer to sell or solicitation of an offer to buy the Shares, nor shall there be any sale of the Shares in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities law of such state or jurisdiction.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
1.1	Equity Distribution Agreement, dated May 20, 2022, by and between VolitionRx Limited and Jefferies LLC.
5.1	Legal Opinion of Stradling Yocca Carlson & Rauth, P.C.
23.1	Consent of Stradling Yocca Carlson & Rauth, P.C. (included in Exhibit 5.1)
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURE

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

VOLITIONRX LIMITED

Date: May 20, 2022

By: /s/ Cameron Reynolds
Cameron Reynolds
Chief Executive Officer & President

VOLITIONRX LIMITED

\$25,000,000

COMMON STOCK

EQUITY DISTRIBUTION AGREEMENT

May 20, 2022

Jefferies LLC
520 Madison Avenue
New York, NY 10022

Ladies and Gentlemen:

VolitionRx Limited, a Delaware corporation (the "**Company**"), confirms its agreement (this "**Agreement**") with Jefferies LLC (the "**Agent**"), as follows:

1. **Issuance and Sale of Shares.** The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell to or through the Designated Agent (as defined in Section 24(b)), shares of the Company's common stock, par value \$0.001 per share (the "**Common Stock**"), having an aggregate offering price of up to \$25,000,000 (the "**Maximum Amount**"), subject to the limitations set forth in Section 3(b) hereof. The issuance and sale of shares of Common Stock to or through the Designated Agent will be effected pursuant to the Registration Statement (as defined below), which has been filed by the Company and has been declared effective by the U.S. Securities and Exchange Commission (the "**Commission**").

Prior to the date of this Agreement, the Company has filed, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "**Securities Act**"), with the Commission, a registration statement on Form S-3, including a base prospectus, relating to certain securities, including the Common Stock, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "**Exchange Act**"). The Company has prepared a prospectus supplement specifically relating to the offer and sale of Placement Shares pursuant to this Agreement included as part of such registration statement (the "**ATM Prospectus**"). As soon as practicable, the Company will furnish to each Agent, for use by such Agent, copies of the ATM Prospectus included as part of such registration statement, relating to the Placement Shares. Except where the context otherwise requires, such registration statement, as amended when it becomes effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B or 462(b) of the Securities Act, is herein called the "**Registration Statement**." The base prospectus, including all documents incorporated therein by reference (to the extent such information has not been superseded or modified in accordance with Rule 412 under the Securities Act (as qualified by Rule 430B(g) of the Securities Act)), and the ATM Prospectus, including all documents incorporated therein by reference (to the extent such information has not been superseded or modified in accordance with Rule 412 under the Securities Act (as qualified by Rule 430B(g) of the Securities Act)), each of which is included in the Registration Statement, as it or they may be supplemented by any additional prospectus supplement, in the form in which such prospectus and/or ATM Prospectus have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act, together with any "issuer free writing prospectus," as defined in Rule 433 of the Securities Act ("**Rule 433**"), relating to the Placement Shares (as defined below) that (i) is required to be filed with the Commission by the Company or (ii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g), is herein called the "**Prospectus**." Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein pursuant to the Securities Act or the Exchange Act. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement thereto shall be deemed to include the most recent copy of the relevant document filed with the Commission pursuant to the Electronic Data Gathering Analysis and Retrieval System or any successor thereto (collectively "**EDGAR**").

2. **Placements.** Each time that the Company wishes to issue and sell the Common Stock through the Designated Agent (each, a **Placement**"), it will notify the Designated Agent by email notice (or other method mutually agreed to in writing by the parties) (a "**Placement Notice**") containing the parameters in accordance with which it desires the Common Stock to be sold, which shall at a minimum include the number of shares of Common Stock to be issued (the "**Placement Shares**"), the time period during which sales are requested to be made, any limitation on the number of shares of Common Stock that may be sold in any one Trading Day (as defined in Section 3) and any minimum price below which sales may not be made, a form of which containing such minimum sales parameters necessary is attached hereto as **Schedule 1**. The Placement Notice shall originate from any of the individuals from the Company set forth on **Schedule 2** (with a copy to each of the other individuals from the Company listed on such schedule), and shall be addressed to each of the individuals from the Designated Agent set forth on **Schedule 2**, as such **Schedule 2** may be amended from time to time by a party by delivering email notice to the other parties of the addition or deletion of individuals of such party. The receipt of each such Placement Notice shall be acknowledged by the Designated Agent by providing email notice to the Company. The Placement Notice shall be effective upon receipt by the Designated Agent unless and until (i) in accordance with the notice requirements set forth in Section 4, the Designated Agent declines to accept the terms contained therein for any reason, in its sole discretion (which the Designated Agent must communicate by providing email notice by the end of the Business Day (as defined below) following the date of receipt of the Placement Notice, or the Placement Notice will be deemed to be accepted by the Designated Agent in accordance with its terms), (ii) the entire amount of the Placement Shares have been sold, (iii) in accordance with the notice requirements set forth in Section 4, the Company suspends or terminates the Placement Notice, (iv) the Company issues a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice, or (v) the Agreement has been terminated under the provisions of Section 11. The amount of any discount, commission or other compensation to be paid by the Company to any Agent in connection with such Agent's sale of the Placement Shares, as the Designated Agent, shall be as set forth in **Schedule 3**. It is expressly acknowledged and agreed that neither the Company nor either Agent will have any obligation whatsoever with respect to a Placement or any Placement Shares unless and until the Company delivers a Placement Notice to a Designated Agent and the Designated Agent does not decline such Placement Notice pursuant to the terms set forth above, and then only upon the terms specified therein and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice, the terms of the Placement Notice will control.

3. Sale of Placement Shares by the Designated Agent

(a) Subject to the terms and conditions herein set forth, upon the Company's issuance of a Placement Notice, and unless the sale of the Placement Shares described therein has been declined, suspended, or otherwise terminated in accordance with the terms of this Agreement, the Designated Agent will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the NYSE American (the "**Exchange**"), for the period specified in the Placement Notice, to sell such Placement Shares up to the amount specified by the Company in, and otherwise in accordance with the terms of such Placement Notice. The Designated Agent will provide written confirmation to the Company (including by email correspondence to each of the individuals of the Company set forth on **Schedule 2**, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) no later than the opening of the Trading Day (as defined below) immediately following the Trading Day on which it has made sales of Placement Shares hereunder setting forth the number of Placement Shares sold on such day, the compensation payable by the Company to the Designated Agent pursuant to **Section 2** with respect to such sales, and the Net Proceeds (as defined below) payable to the Company, with an itemization of the deductions made by the Designated Agent (as set forth in **Section 5(a)**) from the gross proceeds that it receives from such sales. Subject to the terms of the Placement Notice, the Designated Agent may sell Placement Shares by any method permitted by law deemed to be an "at the market" offering as defined in Rule 415 under the Securities Act, including without limitation sales made directly on the Exchange, on any other existing trading market for the Common Stock or to or through a market maker. If expressly authorized by the Company in a Placement Notice, the Designated Agent may also sell Placement Shares in privately negotiated transactions. Subject to **Section 3(c)** below, the Designated Agent shall not purchase Placement Shares for its own account as principal unless expressly authorized to do so by the Company in a Placement Notice. The Company acknowledges and agrees that (i) there can be no assurance that the Designated Agent will be successful in selling Placement Shares, and (ii) the Designated Agent will incur no liability or obligation to the Company or any other person or entity if it does not sell Placement Shares for any reason other than a failure by the Designated Agent to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell such Placement Shares as required under this **Section 3**. For the purposes hereof, "**Trading Day**" means any day on which the Company's Common Stock is purchased and sold on the principal market on which the Common Stock is listed or quoted.

(b) Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares if, after giving effect to the sale of such Placement Shares, the aggregate number or gross sales proceeds of Placement Shares sold pursuant to this Agreement would exceed the lesser of: (i) the number or dollar amount of shares of Common Stock registered pursuant to the Registration Statement pursuant to which the offering hereunder is being made, (ii) the number of authorized but unissued and unreserved shares of Common Stock, (iii) the number or dollar amount of shares of Common Stock permitted to be offered and sold by the Company under Form S-3 (including General Instruction I.B.6. of Form S-3, if and for so long as applicable), (iv) the number or dollar amount of shares of Common Stock authorized from time to time to be issued and sold under this Agreement by the Company's board of directors, a duly authorized committee thereof or a duly authorized executive officer, and notified to the Designated Agent in writing, or (v) the number or dollar amount of shares of Common Stock for which the Company has filed the ATM Prospectus or other prospectus or prospectus supplement thereto specifically relating to the offering of the Placement Shares pursuant to this Agreement. Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares pursuant to this Agreement at a price lower than the minimum price authorized from time to time by the Company's board of directors, a duly authorized committee thereof or a duly authorized executive officer, and notified to the Designated Agent in writing. Notwithstanding anything to the contrary contained herein, the parties hereto acknowledge and agree that compliance with the limitations set forth in this Section 3(b) on the number or dollar amount of Placement Shares that may be issued and sold under this Agreement from time to time shall be the sole responsibility of the Company, and that the Designated Agent shall have no obligation in connection with such compliance.

(c) The Company acknowledges and agrees that the Designated Agent has informed the Company that the Designated Agent may, to the extent permitted under the Securities Act and the Exchange Act (including, without limitation, Regulation M promulgated thereunder), purchase and sell shares of Common Stock for its own account while this Agreement is in effect, and shall be under no obligation to purchase Placement Shares on a principal basis pursuant to this Agreement, except as otherwise agreed by the Designated Agent in a Placement Notice; *provided*, that no such purchase or sales shall take place while a Placement Notice is in effect (except (i) as agreed by the Company and the Designated Agent in the Placement Notice or (ii) to the extent the Designated Agent may engage in sales of Placement Shares purchased or deemed purchased from the Company as a "riskless principal" or in a similar capacity); and, *provided, further*, that the Designated Agent acknowledges and agrees that, except as expressly set forth in a Placement Notice, any such transactions are not being, and shall not be deemed to have been, undertaken at the request or direction of, or for the account of, the Company, and that the Company has and shall have no control over any decision by the Designated Agent to enter into any such transactions.

(d) During the term of this Agreement and notwithstanding anything to the contrary herein, each Agent agrees that in no event will such Agent or its affiliates engage in any market making, bidding, stabilization or other trading activity with regard to the Common Stock or related derivative securities if such activity would be prohibited under Regulation M or other anti-manipulation rules under the Exchange Act.

(c) Each Agent represents and warrants that it is duly registered as a broker-dealer under FINRA, the Exchange Act and the applicable statutes and regulations of each state in which the Placement Shares will be offered and sold, except such states in which such Agent is exempt from registration or such registration is not otherwise required in connection with the offer and sale of the Placement Shares. Each Agent shall continue, for the term of this Agreement, to be duly registered as a broker-dealer under FINRA, the Exchange Act and the applicable statutes and regulations of each state in which the Placement Shares will be offered and sold, except such states in which it is exempt from registration or such registration is not otherwise required in connection with the offer and sale of the Placement Shares.

4. Suspension of Sales.

(a) The Company or the Designated Agent may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on Schedule 2, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on Schedule 2), suspend any offer and sale of Placement Shares for a period of time (a "Suspension Period") in which case the Designated Agent shall immediately cease offering and selling such Placement Shares; *provided, however*, that such suspension shall not affect or impair either party's obligations with respect to any Placement Shares sold hereunder prior to the receipt of such notice. Each of the parties agrees that no such notice under this Section 4 shall be effective against the other unless it is made to one of the individuals named on Schedule 2 hereto, as such schedule may be amended from time to time. During a Suspension Period, the Company shall not issue any Placement Notices and the Designated Agent shall not sell any Placement Shares hereunder. The party that issued a suspension notice shall notify the other party in writing of the Trading Day on which the Suspension Period shall expire not later than twenty-four (24) hours prior to such Trading Day.

(b) Notwithstanding any other provision of this Agreement, except in accordance with a duly adopted trading plan entered into with a Designated Agent that complies with the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, during any period in which the Company is in possession of material non-public information, the Company and the Designated Agent agree that (i) no sale of Placement Shares will take place, (ii) the Company shall not request the sale of any Placement Shares, and (iii) the Designated Agent shall not be obligated to sell or offer to sell any Placement Shares.

5. Settlement.

(a) Settlement of Placement Shares. Unless otherwise specified in the applicable Placement Notice, settlement for sales of Placement Shares will occur on the second (2nd) Trading Day (or such earlier day as is industry practice for regular-way trading) following the respective Point of Sale (as defined below) (each, a "Settlement Date"). The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Placement Shares sold (the "Net Proceeds") will be equal to the aggregate sales price received by the Designated Agent at which such Placement Shares were sold, after deduction for (i) the Designated Agent's discount, commission or other compensation for such sales payable by the Company pursuant to Section 2 hereof, (ii) any other amounts due and payable by the Company to the Designated Agent hereunder pursuant to Section 7(i) hereof, and (iii) any transaction fees imposed by any governmental or self-regulatory organization in respect of such sales. "Point of Sale" means, for a Placement, the time at which an acquiror of Placement Shares entered into a contract, binding upon such acquiror, to acquire such Placement Shares.

(b) Delivery of Placement Shares. On or before each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Placement Shares being sold by crediting the Designated Agent's or its designee's account (provided the Designated Agent shall have given the Company written notice of such designee at least one (1) Trading Day prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System or by such other means of delivery as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradable, transferable, registered shares in good deliverable form. On each Settlement Date, the Designated Agent will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. The Designated Agent will be responsible for providing DWAC instructions or instructions for delivery by other means with regard to the transfer of the Placement Shares being sold. The Company agrees that if the Company, or its transfer agent (if applicable), defaults in its obligation to deliver duly authorized Placement Shares on a Settlement Date (other than as a result of a failure by the Designated Agent to provide instructions for delivery), in addition to and in no way limiting the rights and obligations set forth in Section 9(a) (Indemnification and Contribution) hereto, the Company will (i) hold the Designated Agent, its directors, officers, members, partners, employees and agents of the Designated Agent, each broker-dealer affiliate of the Designated Agent, and each person, if any, who (A) controls the Designated Agent within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or (B) is controlled by or is under common control with the Designated Agent (each, a "**Designated Agent Affiliate**"), harmless against any loss, claim, damage, or reasonable and documented expense (including reasonable and documented legal fees and expenses), as incurred, arising out of or in connection with such default by the Company or its transfer agent (if applicable) and (ii) pay to the Designated Agent any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

(c) Sales Through Agents. With respect to the offering and sale of Placement Shares pursuant to this Agreement, the Company agrees that any offer to sell Placement Shares, any solicitation of an offer to buy Placement Shares, and any sales of Placement Shares shall only be effected by or through the Designated Agent on any single given day, and the Company shall in no event request that more than one Agent offer or sell Placement Shares pursuant to this Agreement on the same day.

6. Representations and Warranties of the Company. The Company, on behalf of itself and its subsidiaries, represents and warrants to, and agrees with, each Agent that as of each Applicable Time (as defined in Section 24(a)) unless such representation, warranty or agreement specifies a different date or time:

(a) Compliance with Registration Requirements. As of each Applicable Time other than the date of this Agreement, the Registration Statement and any Rule 462(b) Registration Statement have been declared effective by the Commission under the Securities Act. The Company has complied, to the Commission's satisfaction, with all requests of the Commission for additional or supplemental information related to the Registration Statement and the Prospectus. No stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, are contemplated or threatened by the Commission. The Registration Statement and, assuming no act or omission on the part of the Agent that would make such statements untrue, the offer and sale of the Placement Shares as contemplated hereby meet the requirements of Rule 415 under the Securities Act and comply in all material respects with said Rule. In the section entitled "Plan of Distribution" in the ATM Prospectus, the Company has named Jefferies LLC as its agent that the Company has engaged in connection with the transactions contemplated by this Agreement. The Company was not and is not an "ineligible issuer" as defined in Rule 405 under the Securities Act. The documents incorporated or deemed to be incorporated by reference in the Registration Statement and the Prospectus, at the time they were filed with the Commission, complied in all material respects with the requirements of the Exchange Act, as applicable, and, when read together with the other information in the Prospectus, do not contain an 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 light of the circumstances under which they were made, not misleading.

(b) No Misstatement or Omission. As of (i) the time of filing of the Registration Statement and (ii) as of the date of this Agreement, the Company was not an "ineligible issuer" in connection with the offering of the Placement Shares pursuant to Rules 164, 405 and 433 under the Securities Act. The Company agrees to notify the Agent promptly upon the Company becoming an "ineligible issuer." The Prospectus when filed will comply or complied and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act. Each of the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendment thereto, at the time it becomes effective, and as of each Applicable Time, if any, will comply in all material respects with the Securities Act and did not and, as of each Applicable Time, if any, will 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 not misleading. The Prospectus, as amended or supplemented, as of its date, did not and, as of each Applicable Time, if any, will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the two immediately preceding sentences do not apply to statements in or omissions from the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with information furnished to the Company in writing by the Agent expressly for use therein. The parties hereto agree that the information provided in writing by or on behalf of the Agent expressly for use in the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, consists solely of the material referred to in Schedule 5 hereto, as updated from time to time. There are no contracts or other documents required to be described in the Prospectus or to be filed as exhibits to the Registration Statement which have not been described or filed as required.

(c) S-3 Eligibility. At the time the Registration Statement and any Rule 462(b) Registration Statement was or will be filed with the Commission, at the time the Registration Statement and any Rule 462(b) Registration Statement was or will be declared effective by the Commission, and at the time the Company's most recent Annual Report on Form 10-K was filed with the Commission, the Company met or will meet the then applicable requirements for the use of Form S-3 under the Securities Act, including, but not limited to, General Instruction I.B.6. of Form S-3, if and for so long as applicable. The Company is not a shell company (as defined in Rule 405 under the Securities Act) and has not been a shell company for at least 12 calendar months previously and if it has been a shell company at any time previously, has filed current Form 10 information (as defined in General Instruction I.B.6. of Form S-3) with the Commission at least 12 calendar months previously reflecting its status as an entity that is not a shell company.

(d) Distribution of Offering Material By the Company. The Company has not distributed and will not distribute, prior to the completion of the Agent's distribution of the Placement Shares, any offering material in connection with the offering and sale of the Placement Shares other than the Prospectus or the Registration Statement.

(e) The Equity Distribution Agreement. This Agreement has been duly authorized, executed and delivered by the Company, and constitutes a valid, legal, and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as rights to indemnity or contribution hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the rights of creditors generally, and subject to general principles of equity. The Company has full corporate power and authority to enter into this Agreement and to authorize, issue and sell the Placement Shares as contemplated by this Agreement. This Agreement conforms in all material respects to the descriptions thereof in the Registration Statement and the Prospectus.

(f) Authorization of the Placement Shares. The Placement Shares to be sold by the Designated Agent have been duly authorized and when issued and paid for as contemplated herein will be validly issued, fully paid and non-assessable. The issuance of the Placement Shares is not subject to the preemptive or other similar rights of any stockholder of the Company.

(g) No Applicable Registration or Other Similar Rights. There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly waived. No person has the right to act as an underwriter or as a financial advisor to the Company in connection with the offer and sale of the Placement Shares hereunder, whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Placement Shares as contemplated hereby or otherwise.

(h) No Material Adverse Change. Except as otherwise disclosed in the Registration Statement or the Prospectus, subsequent to the respective dates as of which information is given in the Prospectus: (i) there has been no material adverse change in the condition (financial or otherwise), assets, operations, business, or prospects of the Company and its subsidiaries, considered as one entity (any such change is called a "**Material Adverse Change**") or any development involving a prospective material adverse change, which, individually or in the aggregate, has had or would reasonably be expected to result in a Material Adverse Change; (ii) the Company and its subsidiaries, considered as one entity, have not incurred any material liability or obligation, indirect, direct or contingent, not in the ordinary course of business nor entered into any material transaction or agreement not in the ordinary course of business; and (iii) there has been no dividend or distribution of any kind declared, paid or made by the Company or, except for regular quarterly dividends publicly announced by the Company or dividends paid to the Company or other subsidiaries, by any of its subsidiaries on any class of capital stock or repurchase or redemption by the Company or any of its subsidiaries of any class of capital stock.

(i) Independent Accountants. Sadler, Gibb & Associates, LLC, who have certified certain financial statements of the Company, whose report with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) and any supporting schedules filed with the Commission or incorporated by reference in the Registration Statement and included or incorporated by reference in the Prospectus, are independent public accountants as required by the Securities Act and the rules and regulations thereunder.

(j) Preparation of the Financial Statements. The consolidated financial statements of the Company, together with related notes and schedules as incorporated by reference in the Registration Statement and the Prospectus, present fairly in all material respects the financial position and the results of operations and cash flows of the Company and its subsidiaries, at the indicated dates and for the indicated periods (subject, in the case of unaudited statements, to normal year-end audit adjustments). Such financial statements and related schedules have been prepared in accordance with U.S. generally accepted principles of accounting, as in effect at the time of filing, consistently applied throughout the periods involved, except as disclosed therein, and all adjustments necessary for a fair presentation of results for such periods have been made (subject (i) to such adjustments to accounting standards and practices as are noted therein, and (ii) in the case of unaudited interim statements, to (A) normal recurring adjustments (B) the exclusion of financial statement footnotes, and (C) the information being presented in a condensed or summary manner). The summary financial and statistical data included or incorporated by reference in the Registration Statement and the Prospectus present fairly in all material respects the information shown therein and such data has been compiled on a basis consistent with the financial statements presented therein and the books and records of the Company. The statistical, industry-related and market-related information included or incorporated by reference in the Registration Statement and the Prospectus are based on or derived from sources which the Company reasonably and in good faith believes are reliable and accurate and the Company has obtained the written consent to the use of such data from such sources to the extent required. The other financial data set forth or incorporated by reference in the Registration Statement and the Prospectus is accurately presented in all material respects and prepared on a basis consistent with the financial statements and books and records of the Company. The Company and its subsidiaries do not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations or any “variable interest entities” as that term is used in Accounting Standards Codification Paragraph 810-10-25-20), not disclosed in the Registration Statement and the Prospectus which are required to be disclosed in the Registration Statement and the Prospectus. All disclosures contained in the Registration Statement or the Prospectus that contain “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission) comply, in all material respects, with Regulation G under the Exchange Act and Item 10 of Regulation S-K under the Securities Act, to the extent applicable.

(k) XBRL. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(l) Incorporation and Good Standing of the Company and its Subsidiaries. The Company is a corporation duly incorporated and validly existing under the laws of the State of Delaware and is in good standing under such laws. The Company has the requisite corporate power to carry on its business as described in the Prospectus. The Company is duly qualified to transact business and is in good standing in all jurisdictions in which the conduct of its business requires such qualification; except where the failure to be so qualified or to be in good standing would not result in a Material Adverse Change. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed on **Schedule 4**. Each subsidiary is a corporation, limited liability company or other organization duly formed and validly existing under the laws of the jurisdiction of its formation and is in good standing under such laws. Each of the subsidiaries has requisite corporate power to carry on its business as described in the Prospectus. Each of the subsidiaries is duly qualified to transact business and is in good standing in all jurisdictions in which the conduct of its business requires such qualification; except where the failure to be so qualified or to be in good standing would not result in a Material Adverse Change.

(m) Capital Stock Matters. The Common Stock conforms in all material respects to the description thereof contained in the Prospectus. The form of certificates for the Common Stock conforms to the corporate law of the jurisdiction of the Company's incorporation. All of the issued and outstanding shares of Common Stock have been duly authorized and validly issued, are fully paid and nonassessable and have been issued in compliance with federal and state securities laws. None of the outstanding shares of Common Stock were issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company or any of its subsidiaries other than those disclosed in the Prospectus or in a document filed as an exhibit to or incorporated by reference into the Registration Statement. All of the issued and outstanding capital stock of, or other ownership interests in, each subsidiary of the Company has been duly authorized and validly issued, is fully paid and non-assessable and, except for directors' qualifying shares, is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance or claim.

(n) Non-Contravention of Existing Instruments; No Further Authorizations or Approvals Required. Neither the Company nor any of its subsidiaries is (i) in breach or violation of its certificate or articles of incorporation, charter, bylaws, limited liability company agreement, certificate or agreement of limited or general partnership, memorandum and articles of association, or other similar organizational documents, as the case may be, of such entity, (ii) in breach of or in default (or, with the giving of notice or lapse of time or both, would be in default) (“**Default**”) under any indenture, mortgage, loan or credit agreement, deed of trust, note, contract, franchise, lease or other agreement, obligation, condition, covenant or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound or to which any of the property or assets of the Company or any of its subsidiaries is subject (each, an “**Existing Instrument**”), or (iii) in violation of any statute, law, rule, regulation, judgment, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its subsidiaries or any of their properties, as applicable, except, with respect to clauses (ii) and (iii) only, for such breaches, violations or Defaults that would not, individually or in the aggregate, result in a Material Adverse Change. The Company’s execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby or by the Registration Statement and the Prospectus (including the issuance and sale of the Placement Shares and the use of the proceeds from the sale of the Placement Shares as described in the Prospectus under the caption “Use of Proceeds”) (i) will not result in any breach or violation of the certificate or articles of incorporation, charter, bylaws, limited liability company agreement, certificate or agreement of limited or general partnership, memorandum and articles of association, or other similar organizational documents, as the case may be, of the Company or any of its subsidiaries, (ii) will not conflict with or constitute a breach of, or Default or a Debt Repayment Triggering Event (as defined below) under, or result in the creation or imposition of any lien, charge, claim or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, or require the consent of any other party to, any Existing Instrument, and (iii) will not result in any violation of any statute, law, rule, regulation, judgment, order or decree applicable to the Company or any of its subsidiaries of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its subsidiaries or any of its or their properties, as applicable, except, with respect to clauses (ii) and (iii) only, for such conflicts, breaches, Defaults, Debt Repayment Triggering Events or violations that would not, individually or in the aggregate, result in a Material Adverse Change. As used herein, a “**Debt Repayment Triggering Event**” means any event or condition which gives, or with the giving of notice or lapse of time or both would give, the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder’s behalf), issued by the Company, the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries. Each approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company of this Agreement and the performance of the Company of the transactions herein contemplated has been obtained or made and is in full force and effect, except (i) such additional steps as may be required by the bylaws and rules of the Financial Industry Regulatory Authority, Inc. (“**FINRA**”) or (ii) such additional steps as may be necessary to qualify the Common Stock for sale by the Agent under state securities or Blue Sky laws, or foreign securities laws if applicable.

(o) No Material Actions or Proceedings: Labor Disputes. There is no action, suit, claim or proceeding pending or, to the knowledge of the Company, threatened against the Company before any court or administrative agency or otherwise (i) that is required to be described in the Registration Statement or the Prospectus and are not so described or (ii) which, if determined adversely to the Company, would reasonably be expected to result in a Material Adverse Change or prevent the consummation of the transactions contemplated hereby, except as set forth in the Registration Statement and the Prospectus. The aggregate of all pending legal or governmental proceedings to which the Company and its subsidiaries is a party or of which any of their property or assets is the subject which are not described in the Prospectus, including ordinary routine litigation incidental to the business, could not reasonably be expected to result in a Material Adverse Change. No labor dispute with the employees of the Company exists or, to the Company's knowledge, is threatened or imminent. None of the employees of the Company or any of its subsidiaries is represented by a union and, to the knowledge of the Company, no union organizing activities are taking place. Neither the Company nor any of its subsidiaries has violated any federal, state or local law or foreign law relating to the discrimination in hiring, promotion or pay of employees, nor any applicable wage or hour laws, or the rules and regulations thereunder, or analogous foreign laws and regulations, which might, individually or in the aggregate, result in a Material Adverse Change.

(p) All Necessary Permits, etc. Each of the Company and its subsidiaries has all licenses, certifications, permits, franchises, approvals, clearances and other regulatory authorizations ("**Permits**") from governmental authorities as are necessary to (i) conduct its businesses as currently conducted and (ii) own, lease and operate its properties in the manner described in the Prospectus, except where the failure to possess, obtain or make the same would not, individually or in the aggregate result in a Material Adverse Change. There is no claim or proceeding pending or, to the knowledge of the Company, threatened in writing, involving the status of or sanctions under any of the Permits. Each of the Company and its subsidiaries has fulfilled and performed all of its material obligations with respect to the Permits, and the Company is not aware of the occurrence of any event which allows, or after notice or lapse of time would allow, the revocation, termination, or other impairment of the rights of the Company or any of its subsidiaries under such Permit.

(q) Tax Law Compliance. All United States federal income tax returns of the Company and its subsidiaries required by law to be filed have been filed or extensions thereof have been requested, and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments that are being contested in good faith and as to which adequate reserves have been provided, and except where the failure to do so would not result in a Material Adverse Change. Each of the Company and its subsidiaries has filed all other tax returns that are required to have been filed by it pursuant to applicable foreign, state, provincial, local or other law except insofar as the failure to file such returns would not result in a Material Adverse Change, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company and its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been provided and except for such taxes or assessments the nonpayment of which would not, individually or in the aggregate, result in a Material Adverse Change. The charges, accruals and reserves on the books of the Company and its subsidiaries in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional tax for any years not finally determined, except to the extent of any inadequacy that would not result in a Material Adverse Change. All taxes which the Company and its subsidiaries are required by law to withhold or to collect for payment have been duly withheld and collected and have been paid to the appropriate governmental authority or agency or have been accrued, reserved against and entered on the books of the Company and its subsidiaries, except to the extent that would not result in a Material Adverse Change. There are no transfer taxes or other similar fees or charges under Federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Designated Agent of the Placement Shares.

(r) Company Not an “Investment Company”. The Company has been advised of the rules and requirements under the Investment Company Act of 1940, as amended (the “**Investment Company Act**”). The Company is not, and after receipt of payment for the Placement Shares will not be, an “investment company” within the meaning of Investment Company Act and will conduct its business in a manner so that it will not become subject to the Investment Company Act.

(s) Insurance. Except as otherwise described in the Prospectus, the Company carries, or is covered by, insurance in such amounts and covering such risks as it believes is reasonably adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar industries. All policies of insurance insuring the Company or its business, assets, employees, officers and directors are in full force and effect, and the Company is in compliance with the terms of such policies in all material respects. There are no claims by the Company under any such policy or instrument as to which an insurance company is denying liability or defending under a reservation of rights clause. The Company has no reason to believe that it will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Change.

(t) No Price Stabilization or Manipulation. Neither the Company, nor any of its subsidiaries, nor any of its or their respective directors, officers or, to the knowledge of the Company, controlling persons has taken, directly or indirectly, any action designed to or that might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Common Stock.

(u) Related Party Transactions. There are no business relationships or related-party transactions involving the Company or any subsidiary or any other person required to be described in the Prospectus which have not been described as required.

(v) Exchange Act Compliance. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Prospectus or any amendment or supplement thereto, at the time they were or hereafter are filed with the Commission under the Exchange Act, complied and will comply in all material respects with the requirements of the Exchange Act, and, when read together with the other information in the Prospectus, at each Point of Sale and each Settlement Date, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the 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.

(w) Compliance with Environmental Laws. To its knowledge, the Company is not in violation of any statute, any rule, regulation, decision or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous chemicals, toxic substances or radioactive and biological materials or relating to the protection or restoration of the environment or human exposure to hazardous chemicals, toxic substances or radioactive and biological materials (collectively, “**Environmental Laws**”). The Company neither owns nor, to its knowledge, operates any real property contaminated with any substance that is subject to any Environmental Laws, is not liable for any off-site disposal or contamination pursuant to any Environmental Laws, nor is it subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim would individually or in the aggregate result in a Material Adverse Change; and the Company is not aware of any pending investigation which might lead to such a claim.

(x) **Intellectual Property.** Each of the Company and its subsidiaries owns and has full right, title and interest in and to, or has valid licenses to use, each material trade name, trademark, service mark, patent, copyright, approval, trade secret and other similar rights (collectively “**Intellectual Property**”) under which the Company and its subsidiaries conduct all or any material part of their respective businesses, and the Company has not created any lien or encumbrance on, or granted any right or license with respect to, any such Intellectual Property, except where the failure to own or obtain a license or right to use any such Intellectual Property could not reasonably be expected to result in a Material Adverse Change; there is no claim pending against the Company or its subsidiaries with respect to any Intellectual Property, and the Company and its subsidiaries have not received notice or otherwise become aware that any Intellectual Property that it uses or has used in the conduct of its business infringes upon or conflicts with the rights of any third party. The Intellectual Property of the Company has not been adjudged by a court of competent jurisdiction to be invalid or unenforceable, in whole or in part, and the Company is unaware of any facts which would form a reasonable basis for any such adjudication. To the Company's knowledge: (i) there are no third parties who have rights to any Intellectual Property, except for customary reversionary rights of third-party licensors with respect to Intellectual Property that is disclosed in the Registration Statement and the Prospectus as licensed to the Company or one or more of its subsidiaries; and (ii) there is no infringement by third parties of any Intellectual Property. There is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the Company's rights in or to any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim, in each case except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Change; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim, in each case except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Change; or (C) asserting that the Company or any of its subsidiaries infringes or otherwise violates, or would, upon the commercialization of any product or service described in the Registration Statement or the Prospectus as under development, infringe or violate, any patent, trademark, trade name, service name, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. The Company and its subsidiaries have complied in all material respects with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or any subsidiary, and all such agreements are in full force and effect. To the Company's knowledge, there are no material defects in any of the patents or patent applications included in the Intellectual Property. The Company and its subsidiaries have taken all commercially reasonable steps to protect, maintain and safeguard their Intellectual Property, including the execution of appropriate nondisclosure, confidentiality agreements and invention assignment agreements and invention assignments with their employees, and, to the Company's knowledge, no employee of the Company is in or has been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement, or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company. The duty of candor and good faith as required by the United States Patent and Trademark Office during the prosecution of the United States patents and patent applications included in the Intellectual Property have been complied with; and in all foreign offices having similar requirements, all such requirements have been complied with. None of the Company owned Intellectual Property or technology (including information technology and outsourced arrangements) employed by the Company or its subsidiaries has been obtained or is being used by the Company or its subsidiary in violation of any contractual obligation binding on the Company or its subsidiaries or any of their respective officers, directors or employees or otherwise in violation of the rights of any persons. The product candidates described in the Registration Statement and the Prospectus as under development by the Company or any subsidiary fall within the scope of the claims of one or more patents owned by, or exclusively licensed to, the Company or any subsidiary.

(y) Brokers. Other than the Agent, there is no broker, finder or other party that is entitled to receive from the Company any brokerage or finder's fee or other fee or commission as a result of any transactions contemplated by this Agreement.

(z) No Outstanding Loans or Other Indebtedness. There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of their respective family members, except as disclosed in the Prospectus to the extent required to be disclosed therein. The Company has not directly or indirectly extended or maintained credit, arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any director or executive officer of the Company.

(aa) No Reliance. The Company has not relied upon the Agent or legal counsel for the Agent for any legal, tax or accounting advice in connection with the offering and sale of the Placement Shares.

(bb) Broker-Dealer Status. Neither the Company nor any of its related entities (i) is required to register as a "broker" or "dealer" in accordance with the provisions of the Exchange Act or (ii) directly or indirectly through one or more intermediaries, controls or is a "person associated with a member" or "associated person of a member" (within the meaning of Article I of the NASD Manual administered by FINRA). To the Company's knowledge, there are no affiliations or associations between any member of FINRA and any of the Company's officers, directors or 5% or greater security holders, except as set forth in the Registration Statement. All of the information (including, but not limited to, information regarding affiliations, security ownership and trading activity) provided to the Agent or their counsel by the Company, and to the Company's knowledge, its officers and directors and the holders of any securities (debt or equity) or warrants, options or rights to acquire any securities of the Company in connection with the filing to be made and other supplemental information to be provided to FINRA pursuant to Rule 5110 of FINRA in connection with the transactions contemplated by this Agreement is true, complete and correct, and copies of any Company filings required to be filed with FINRA have been filed with the Commission or delivered to the Agent for filing with FINRA.

(cc) Compliance with Laws. The Company has not been advised, and has no reason to believe, that it and each of its subsidiaries are not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, except where failure to be so in compliance would not result in a Material Adverse Change.

(dd) Dividend Restrictions. Except as disclosed in the Registration Statement or the Prospectus, no subsidiary of the Company is prohibited or restricted, directly or indirectly, from paying dividends to the Company, or from making any other distribution with respect to such subsidiary's equity securities or from repaying to the Company or any other subsidiary of the Company any amounts that may from time to time become due under any loans or advances to such subsidiary from the Company or from transferring any property or assets to the Company or to any other subsidiary.

(ee) Certain Regulations. The studies, tests and clinical trials conducted by or on behalf of the Company and its subsidiaries were and, if still pending, are being conducted in compliance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all applicable laws and authorizations, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder, except where the failure to be in compliance would not reasonably be expected to result in a Material Adverse Change; the descriptions of the results of such studies, tests and clinical trials contained in the Registration Statement and the Prospectus are accurate and complete in all material respects and fairly present the data derived from such studies, tests and clinical trials; except to the extent disclosed in the Registration Statement and the Prospectus, to the knowledge of the Company, there are no studies, tests or clinical trials, the results of which the Company believes reasonably call into question the study, test, or clinical trial results described or referred to in the Registration Statement and the Prospectus when viewed in the context in which such results are described; and, except to the extent disclosed in the Registration Statement and the Prospectus, the Company and its subsidiaries have not received any notices or correspondence from any applicable governmental authority requiring the termination, suspension or material modification of any studies, tests or clinical trials conducted by or on behalf of the Company or its subsidiaries.

(ff) FDA Regulations. The Company and its subsidiaries: (A) are and at all times have been in material compliance with all statutes, rules, or regulations, including but not limited to those administered by the United States Food and Drug Administration (“**FDA**”), the European Medicines Agency (“**EMA**”) and similar governmental authorities applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any products being developed, manufactured or distributed by the Company or its subsidiaries (“**Applicable Laws**”), except as could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change; (B) have not received any warning letter or other correspondence or notice from the FDA, EMA or any other governmental authority alleging or asserting noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”); (C) possess all material Authorizations and such Authorizations are valid and in full force and effect and are not in material violation of any term of any such Authorizations; (D) have not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations and have no knowledge that any such governmental authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) have not received written notice that any governmental authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and have no knowledge that any such governmental authority is considering such action; (F) have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations, and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission); and (G) have not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company’s knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

(gg) Sarbanes-Oxley Act. There is and has been no failure on the part of the Company or any of the Company’s directors or officers, in their capacities as such, to comply in all material respects with any applicable provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith (the “**Sarbanes-Oxley Act**”), including Section 402 related to loans and Sections 302 and 906 related to certifications.

(hh) Disclosure Controls And Procedures. Except as otherwise disclosed in the Registration Statement or the Prospectus, the Company has established and maintains “disclosure controls and procedures” (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) reasonably designed to ensure that all information (both financial and non-financial) required to be disclosed by the Company in the reports that it will file or furnish under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and regulations of the Commission, and that all such information is accumulated and communicated to the Company’s management as appropriate to allow timely decisions regarding required disclosure and to make the certifications of the Chief Executive Officer and Chief Financial Officer of the Company required under the Exchange Act with respect to such reports.

(ii) Company’s Accounting System. Except as otherwise disclosed in the Registration Statement or the Prospectus, the Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management’s general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (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 existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(jj) ERISA. (i) The Company is in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder (“**ERISA**”); (ii) no “reportable event” (as defined in ERISA) has occurred with respect to any “pension plan” (as defined in ERISA) for which the Company would have any liability; (iii) the Company has not incurred and does not expect to incur liability under (A) Title IV of ERISA with respect to termination of, or withdrawal from, any “pension plan” or (B) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the “**Code**”); and (iv) each “pension plan” for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification, except in the case of (ii) and (iv), where such failure would not result in a Material Adverse Change.

(kk) Contracts and Agreements. There are no contracts, agreements, instruments or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits thereto which have not been so described in all material respects and filed as required by Item 601(b) of Regulation S-K under the Securities Act. The copies of all contracts, agreements, instruments and other documents (including governmental licenses, authorizations, permits, consents and approvals and all amendments or waivers relating to any of the foregoing) that have been furnished to the Agent or its counsel are complete in all material respects and genuine and include all material collateral and supplemental agreements thereto. All contracts and agreements between the Company and third parties expressly referenced in the Registration Statement or the Prospectus are legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as rights to indemnity or contribution thereunder (as applicable) may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally, and subject to general principles of equity.

(ll) Title to Properties. Except as set forth in the Registration Statement and the Prospectus, the Company and each of its subsidiaries have good and marketable title to all of the properties and assets reflected as owned in the financial statements referred to in Section 6(j) above (or elsewhere in the Registration Statement and the Prospectus), in each case free and clear of any security interests, mortgages, liens, encumbrances, equities, claims and other defects, except such as do not materially and adversely affect the value of such property or assets and do not materially interfere with the use made or proposed to be made of such property by the Company or any subsidiary. The material real property, improvements, equipment and personal property held under lease by the Company or any of its subsidiaries are held under valid and enforceable leases, with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment or personal property by the Company or such subsidiary. The Company and each of its subsidiaries have such consents, easements, rights-of-way or licenses from any person (“**rights-of-way**”) as are necessary to enable the Company and each of its subsidiaries to conduct its business in the manner described in the Registration Statement and the Prospectus, and except for such rights-of-way the lack of which would not, individually or in the aggregate, result in a Material Adverse Change.

(mm) No Unlawful Contributions or Other Payments. No payments or inducements have been made or given, directly or indirectly, to any federal or local official or candidate for, any federal or state office in the United States or foreign offices by the Company or any of its officers or directors, or, to the knowledge of the Company, by any of its employees or agents or any other person in connection with any opportunity, contract, permit, certificate, consent, order, approval, waiver or other authorization relating to the business of the Company, except for such payments or inducements as were lawful under applicable laws, rules and regulations. Neither the Company, nor, to the knowledge of the Company, any director, officer, agent, employee or other person associated with or acting on behalf of the Company, (i) has used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made any direct or indirect unlawful payment to any government official or employee from corporate funds; or (iii) made any bribe, unlawful rebate, payoff, influence payment, kickback or other unlawful payment in connection with the business of the Company.

(nn) Foreign Corrupt Practices Act. None of the Company, any subsidiary or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries, is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (collectively, the "**FCPA**"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA. The Company and its subsidiaries have conducted their respective businesses in compliance in all material respects with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance in all material respects therewith.

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

(pp) OFAC. None of the Company, any subsidiary or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or person acting on behalf of the Company or any of its subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("**OFAC**"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(q q) Exchange Listing. The Common Stock is currently listed on the Exchange under the trading symbol “VNRX”. Except as disclosed in the Prospectus, the Company has not, in the 12 months preceding the date the first Placement Notice is given hereunder, received notice from the Exchange to the effect that the Company is not in compliance with the listing or maintenance requirements. Except as disclosed in the Prospectus, the Company 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.

(rr) Margin Rules. Neither the issuance, sale and delivery of the Placement Shares nor the application of the proceeds thereof by the Company as described in the Registration Statement and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(ss) Continuous Offering Agreements. Except for this Agreement, the Company is not party to any other equity distribution or sales agency agreement or on any rental arrangement with any other agent or any other representative in respect of any “at the market offering” or other continuous equity offering transaction.

(tt) No Material Defaults. Neither the Company nor any of its subsidiaries has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change.

(uu) Cybersecurity. The Company and its subsidiaries’ information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, “**IT Systems**”) are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company as currently conducted, to the Company’s knowledge, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and its subsidiaries have implemented and maintained commercially reasonable physical, technical and administrative controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data, including all “Personal Data” (defined below) and all sensitive, confidential or regulated data (“**Confidential Data**”) used in connection with their businesses. “**Personal Data**” means (i) a natural person’s name, street address, telephone number, e-mail address, photograph, social security number or tax identification number, driver’s license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as “personally identifying information” under the Federal Trade Commission Act, as amended; (iii) “personal data” as defined by GDPR; (iv) any information which would qualify as “protected health information” under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (collectively, “**HIPAA**”); (v) any “personal information” as defined by the California Consumer Privacy Act (“**CCPA**”); and (vi) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person’s health or sexual orientation. To the Company’s knowledge, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, 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 material compliance 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, Confidential Data, and Personal Data and to the protection of such IT Systems, Confidential Data, and Personal Data from unauthorized use, access, misappropriation or modification.

(vv) Compliance with Data Privacy Laws. The Company and its subsidiaries are, and at all prior times were, in material compliance with all applicable state and federal data privacy and security laws and regulations, including without limitation HIPAA, CCPA, and the European Union General Data Protection Regulation (“**GDPR**”) (EU 2016/679) (collectively, the “**Privacy Laws**”). To ensure compliance with the Privacy Laws, the Company has in place, complies with, and takes appropriate steps reasonably designed to ensure compliance in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, processing, disclosure, handling, and analysis of Personal Data and Confidential Data (the “**Policies**”). The Company has at all times made all disclosures to users or customers required by applicable laws and regulatory rules or requirements, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any applicable laws and regulatory rules or requirements in any material respect. The Company further certifies that neither it nor any subsidiary: (i) has received notice of any actual or potential liability under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement that imposes any obligation or liability under any Privacy Law.

Any certificate signed by an officer of the Company and delivered to the Agent or to counsel for the Agent pursuant to or in connection with this Agreement shall be deemed to be a representation and warranty by the Company to the Agent as to the matters set forth therein.

The Company acknowledges that the Agent and, for purposes of the opinions to be delivered pursuant to Section 7 hereof, counsel to the Company and counsel to the Agent, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

7. Covenants of the Company. The Company covenants and agrees with each Agent that:

(a) Registration Statement Amendments. After the date of this Agreement and during any period in which a Prospectus relating to any Placement Shares is required to be delivered by a Designated Agent pursuant to this Agreement under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), (i) the Company will notify the Agent promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or for additional information, (ii) the Company will prepare and timely file with the Commission, upon either Agent's request, any amendments or supplements to the Registration Statement or Prospectus that, upon the advice of the Company's legal counsel (after due consultation with such Agent and its counsel), may be necessary or advisable in connection with the distribution of the Placement Shares by the Agent (*provided, however*, that the failure of the Agent to make such request shall not relieve the Company of any obligation or liability hereunder, or affect the Agent's right to rely on the representations and warranties made by the Company in this Agreement, and *provided, further*, that the only remedy the Agent shall have with respect to the failure to make such filing shall be to cease making sales under this Agreement until such amendment or supplement is filed); (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus, other than documents incorporated by reference, relating to the Placement Shares or a security convertible into the Placement Shares unless a copy thereof has been submitted to the Agent within a reasonable period of time before the filing and neither Agent has reasonably objected thereto (*provided, however*, that the failure of either Agent to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect the Agent's right to rely on the representations and warranties made by the Company in this Agreement, and *provided, further*, that the only remedy the Agent shall have with respect to the failure by the Company to obtain such consent shall be to cease making sales under this Agreement); (iv) the Company will furnish to the Agent at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via EDGAR; (v) the Company will cause each amendment or supplement to the Prospectus, other than documents incorporated by reference, to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act (without reliance on Rule 424(b)(8) of the Securities Act) or, in the case of any documents incorporated by reference, to be filed with the Commission as required pursuant to the Exchange Act, within the time period prescribed. Neither the Company nor the Agent has prepared, used, referred to or distributed, or will prepare, use, refer to or distribute, without the other party's prior written consent, any "written communication" that constitutes a "free writing prospectus" as such terms are defined in Rule 405 under the Securities Act with respect to the offering contemplated by this Agreement (any such free writing prospectus being referred to herein as a "Free Writing Prospectus").

(b) Free Writing Prospectuses. The Company shall furnish to the Agent for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of each proposed free writing prospectus or any amendment or supplement thereto to be prepared by or on behalf of, used by, or referred to by the Company and the Company shall not file, use or refer to any proposed free writing prospectus or any amendment or supplement thereto without the Agent's consent, which shall not be unreasonably withheld, conditioned or delayed. The Company shall furnish to the Agent, without charge, as many copies of any free writing prospectus prepared by or on behalf of, or used by the Company, as the Agent may reasonably request. If at any time when a prospectus is required by the Securities Act (including, without limitation, pursuant to Rule 173(d)) to be delivered in connection with sales of the Shares (but in any event if at any time through and including the date of this Agreement) there occurred or occurs an event or development as a result of which any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company conflicted or would conflict with the information contained in the Registration Statement or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company shall promptly amend or supplement such free writing prospectus to eliminate or correct such conflict or so that the statements in such free writing prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such subsequent time, not misleading, as the case may be; provided, however, that prior to amending or supplementing any such free writing prospectus, the Company shall furnish to the Agent for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of such proposed amended or supplemented free writing prospectus and the Company shall not file, use or refer to any such amended or supplemented free writing prospectus without the Agent's consent, which shall not be unreasonably withheld, conditioned or delayed.

(c) Filing of Agent Free Writing Prospectuses. The Company shall not take any action that would result in the Agent or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Agent that the Agent otherwise would not have been required to file thereunder.

(d) Notice of Commission Stop Orders. The Company will advise the Agent, promptly after it receives notice or obtains knowledge thereof, of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any notice objecting to, or other order preventing or suspending the use of, the Prospectus, of the suspension of the qualification of the Placement Shares for offering or sale in any jurisdiction, or of the initiation of any proceeding for any such purpose or any examination pursuant to Section 8(e) of the Securities Act, or if the Company becomes the subject of a proceeding under Section 8A of the Securities Act in connection with the offering of the Placement Shares; and it will promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued. Until such time as any stop order is lifted, the Designated Agent shall cease making offers and sales under this Agreement.

(e) Delivery of Prospectus; Subsequent Changes. During any period in which a Prospectus relating to the Placement Shares is required to be delivered by a Designated Agent under the Securities Act with respect to a pending sale of the Placement Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will comply with all requirements imposed upon it by the Securities Act, as from time to time in force, and to file on or before their respective due dates all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, 15(d) or any other provision of or under the Exchange Act. If during such period any event occurs as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend or supplement the Registration Statement or Prospectus to comply with the Securities Act, the Company will promptly notify the Agent to suspend the offering of Placement Shares during such period and the Company will promptly amend or supplement the Registration Statement or Prospectus (at the expense of the Company) so as to correct such statement or omission or effect such compliance; *provided, however*, that the Company may delay the filing of any amendment or supplement (subject to continued suspension of the offering of Placement Shares by a Designated Agent during such period), if in the judgment of the Company, it is in the best interest of the Company to do so.

(f) Listing of Placement Shares. During any period in which the Prospectus relating to the Placement Shares is required to be delivered by a Designated Agent under the Securities Act with respect to a pending sale of the Placement Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will use its commercially reasonable efforts to cause the Placement Shares to be listed on the Exchange and to qualify the Placement Shares for sale under the securities laws of such jurisdictions in the United States as each Agent reasonably designates and to continue such qualifications in effect so long as required for the distribution of the Placement Shares; *provided, however*, that the Company shall not be required in connection therewith to qualify as a foreign corporation or dealer in securities or file a general consent to service of process, or subject itself to taxation in any jurisdiction if it is not otherwise so subject.

(g) Delivery of Registration Statement and Prospectus. The Company will furnish to the Agent and its counsel (at the reasonable expense of the Company) copies of (i) the Registration Statement and the Prospectus (including all documents incorporated by reference therein) filed with the Commission on the date of this Agreement and (ii) all amendments and supplements to the Registration Statement or Prospectus that are filed with the Commission during any period in which a Prospectus relating to the Placement Shares is required to be delivered by a Designated Agent under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities as each Agent may from time to time reasonably request and, at the Agent's reasonable request, will also furnish copies of the Prospectus to each exchange or market on which sales of the Placement Shares may be made; *provided, however*, that the Company shall not be required to furnish any document (other than the Prospectus) to the Agent to the extent such document is available on EDGAR.

(h) Earnings Statement. The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement of the Company and its subsidiaries (which need not be audited) covering a 12-month period that complies with Section 11(a) and Rule 158 of the Securities Act. The terms "earnings statement" and "make generally available to its security holders" shall have the meanings set forth in Rule 158 under the Securities Act.

(i) Expenses. The Company, to the extent such expenses accrue prior to the termination of this Agreement in accordance with the provisions of Section 11 hereunder, will pay the following expenses all incident to the performance of its obligations hereunder, including, but not limited to, expenses relating to (i) the preparation, printing and filing of the Registration Statement and each amendment and supplement thereto, of each Prospectus and of each amendment and supplement thereto, (ii) the preparation, issuance and delivery of the Placement Shares, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Placement Shares to the Agent, (iii) the fees and disbursements of the counsel, accountants and other advisors to the Company in connection with the transactions contemplated by this Agreement; (iv) the qualification of the Placement Shares under securities laws in accordance with the provisions of Section 7(f) of this Agreement, including filing fees (*provided, however*, that any fees or disbursements of counsel for the Agent in connection therewith shall be paid by the Agent except as set forth in (ix) below), (v) the printing and delivery to the Agent of copies of the Prospectus and any amendments or supplements thereto, and of this Agreement, (vi) the fees and expenses incurred in connection with the listing or qualification of the Placement Shares for trading on the Exchange, (vii) the fees and expenses of the transfer agent or registrar for the Common Stock; (viii) filing fees and expenses, if any, of the Commission and the FINRA Corporate Financing Department, and (ix) the Company shall reimburse the Agent for the reasonable out-of-pocket fees and disbursements of the Agent's counsel (a) in an amount not to exceed \$50,000 in the aggregate in connection with the execution of this Agreement and (b) in an amount not to exceed \$15,000 in the aggregate in connection with, following the first Representation Date, each Representation Date on which the Company is required to provide a certificate pursuant to Section 7(p) below, unless otherwise approved by the Company (such approval not to be unreasonably withheld, conditioned or delayed).

(j) Use of Proceeds. The Company will use the Net Proceeds as described in the Prospectus in the section entitled "Use of Proceeds."

(k) Notice of Other Sales. During the pendency of any Placement Notice given hereunder, the Company shall provide the Agent notice as promptly as reasonably possible before it offers to sell, contracts to sell, sells, grants any option to sell or otherwise disposes of any shares of Common Stock (other than Placement Shares offered pursuant to the provisions of this Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire Common Stock; *provided*, that such notice shall not be required in connection with the (i) issuance, grant or sale of Common Stock, options or other rights to purchase or otherwise acquire Common Stock, or Common Stock issuable upon the exercise of options or other equity awards, in each case granted pursuant to any stock option, stock bonus or other stock or compensatory plan or arrangement, whether now in effect or hereafter implemented or Common Stock issued upon the vesting or exercise of any such equity awards, (ii) issuance of securities in connection with an acquisition, merger or sale or purchase of assets which is described at the time of issuance in the Registration Statement and the Prospectus, (iii) issuance or sale of Common Stock upon conversion of securities or the exercise of warrants, options or other rights then in effect or outstanding, and disclosed in filings by the Company available on EDGAR or otherwise in writing to the Agent, and (iv) issuance or sale of Common Stock pursuant to any dividend reinvestment and stock purchase plan that the Company has in effect or may adopt from time to time, *provided* that the implementation of such new plan is disclosed to the Agent in advance. If the Company notifies the Agent under this Section 7(k) of a proposed sale of shares of Common Stock or Common Stock equivalents, the Agent may suspend any offers and sales of Securities under this Agreement for a period of time deemed appropriate by the Agent.

(l) Change of Circumstances. The Company will, at any time during a fiscal quarter in which the Company intends to tender a Placement Notice or sell Placement Shares, advise the Designated Agent promptly after it shall have received notice or obtained knowledge thereof, of any information or fact that would materially and adversely affect any opinion, certificate, letter or other document required to be provided to the Agent pursuant to this Agreement.

(m) Transfer Agent. The Company shall engage and maintain, at its expense, a registrar and transfer agent for the Shares.

(n) Due Diligence Cooperation. The Company will cooperate with any reasonable due diligence review conducted by the Agent or its agents in connection with the transactions contemplated hereby, including, without limitation, providing information and making available upon reasonable prior notice documents and senior corporate officers, during regular business hours and at the Company's principal offices, as the Agent may reasonably request.

(o) Required Filings Relating to Placement of Placement Shares. The Company shall set forth in each Annual Report on Form 10-K and Quarterly Report on Form 10-Q filed by the Company with the Commission in respect of any quarter in which sales of Placement Shares were made by or through the Agent under this Agreement, with regard to the relevant period, the amount of Placement Shares sold to or through the Agent, the Net Proceeds to the Company and the compensation payable by the Company to the Agent with respect to such sales of Placement Shares. To the extent that the filing of a prospectus supplement to the Prospectus with the Commission with respect to any sales of Placement Shares becomes required under Rule 424(b) under the Securities Act, the Company agrees that, on or before such dates as the Securities Act shall require, the Company will (i) file a prospectus supplement to the Prospectus with the Commission under the applicable paragraph of Rule 424(b) under the Securities Act, which prospectus supplement will set forth, with regard to the relevant period, the amount of Placement Shares sold to or through the Agent, the Net Proceeds to the Company and the compensation payable by the Company to the Agent with respect to such Placement Shares, and (ii) deliver such number of copies of each such prospectus supplement to each exchange or market on which such sales were effected as may be required by the rules or regulations of such exchange or market. The Company shall afford the Agent and its counsel with a reasonable opportunity to review and comment upon, shall consult with the Agent and its counsel on the form and substance of, any such filing prior to the issuance, filing or public disclosure thereof; *provided, however*, that the Company shall not be required to submit for review (A) any portion of any periodic reports filed with the Commission under the Exchange Act other than the specific disclosure relating to any sales of Placement Shares and (B) any disclosure contained in periodic reports filed with the Commission under the Exchange Act if it shall have previously provided the same disclosure for review in connection with a previous filing.

(p) Representation Dates; Certificate. On or prior to the date the first Placement Notice is given hereunder and each time the Company subsequently thereafter (i) amends or supplements the Registration Statement or the Prospectus relating to the Placement Shares (other than (A) a prospectus supplement filed in accordance with Section 7(o) of this Agreement or (B) a supplement or amendment that relates to an offering of securities other than the Placement Shares) by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of document(s) by reference to the Registration Statement or the Prospectus relating to the Placement Shares; (ii) files an annual report on Form 10-K under the Exchange Act (including any Form 10-K/A containing amended financial information or a material amendment to the previously filed Form 10-K); (iii) files a quarterly report on Form 10-Q under the Exchange Act; or (iv) files a report on Form 8-K containing amended financial information (other than an earnings release, to “furnish” information pursuant to Items 2.02 or 7.01 of Form 8-K or to provide disclosure pursuant to Item 8.01 of Form 8-K relating to the reclassification of certain properties as discontinued operations in accordance with Statement of Financial Accounting Standards No. 144) under the Exchange Act (each date of filing of one or more of the documents and each other date referred to in clauses (i) through (iv) shall be a “**Representation Date**”), the Company shall furnish the Agent within three (3) Trading Days after each Representation Date (but in the case of clause (iv) above only if the Agent reasonably determine that the information contained in such Form 8-K is material) with a certificate, in the form attached hereto as Exhibit 7(p). The requirement to provide a certificate under this Section 7(p) shall be waived for any Representation Date occurring at a time at which no Placement Notice is pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Placement Notice hereunder (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date; *provided, however*, that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Placement Shares following a Representation Date when the Company relied on such waiver and did not provide the Agent with a certificate under this Section 7(p), then before the Company delivers the Placement Notice or either Agent sells any Placement Shares, the Company shall provide the Agent with a certificate, in the form attached hereto as Exhibit 7(p), dated the date of the Placement Notice.

(q) Legal Opinion. On or prior to the date the first Placement Notice is given hereunder, the Company shall cause to be furnished to the Agent (i) the written opinions and negative assurance of Stradling Yocca Carlson & Rauth, P.C., counsel to the Company, or other counsel reasonably satisfactory to the Agent (“**Company Counsel**”), (ii) the written opinions and negative assurance of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Agent (“**Agent Counsel**”), (iii) the written opinions and negative assurance of Sagittarius IP, intellectual property counsel to the Company, or other counsel reasonably satisfactory to the Agent (“**Company IP Counsel**”), in each case in form and substance reasonably satisfactory to the Agent. Thereafter, within three (3) Trading Days after each Representation Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 7(p) for which no waiver is applicable pursuant to Section 7(p), and not more than once per calendar quarter, the Company shall cause to be furnished to the Agent the written opinions and negative assurance of Company Counsel and written opinions and negative assurance of Company IP Counsel substantially in the form previously agreed between the Company and the Agent, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented; *provided, however*, that if Company Counsel or Company IP Counsel has previously furnished to the Agent such written opinions and negative assurance substantially in the form previously agreed between the Company and the Agent, such counsel may, in respect of any future Representation Date, furnish the Agent with a letter (a “**Reliance Letter**”) in lieu of such opinions and negative assurance to the effect that the Agent may rely on the prior opinions and negative assurance of such counsel delivered pursuant to this Section 7(q) to the same extent as if it were dated the date of such Reliance Letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented to the date of such Reliance Letter).

(r) Comfort Letter. On or prior to the date the first Placement Notice is given hereunder and within three (3) Trading Days after each subsequent Representation Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 7(p) for which no waiver is applicable pursuant to Section 7(p), the Company shall cause its independent accountants to furnish the Agent letters (the "**Comfort Letters**"), dated the date that the Comfort Letter is delivered, in form and substance satisfactory to the Agent, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act, the Exchange Act and the rules and regulations of the PCAOB and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants' "comfort letters" to the Agent in connection with registered public offerings (the first such letter, the "**Initial Comfort Letter**") and (iii) updating the Initial Comfort Letter with any information that would have been included in the Initial Comfort Letter had it been given on such date and modified as necessary to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter.

(s) Market Activities. The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Common Stock or (ii) sell, bid for, or purchase the Placement Shares to be issued and sold pursuant to this Agreement, or pay anyone any compensation for soliciting purchases of the Placement Shares other than the Agent.

(t) Insurance. The Company and its subsidiaries shall maintain, or caused to be maintained, insurance in such amounts and covering such risks as is reasonable and customary for the conduct of its business and the value of its properties.

(u) Compliance with Laws. The Company and each of its subsidiaries shall maintain, or cause to be maintained, all material environmental permits, licenses and other authorizations required by federal, state and local law in order to conduct their businesses as described in the Prospectus, and the Company and each of its subsidiaries shall conduct their businesses, or cause their businesses to be conducted, in substantial compliance with such permits, licenses and authorizations and with applicable environmental laws, except where the failure to maintain or be in compliance with such permits, licenses and authorizations would not reasonably be expected to result in a Material Adverse Change.

(v) Investment Company Act. The Company will conduct its affairs in such a manner so as to reasonably ensure that neither it nor its subsidiaries is or, after giving effect to the offering and sale of the Placement Shares and the application of proceeds therefrom as described in the Prospectus, will be, an "investment company" within the meaning of such term under the Investment Company Act.

(w) Securities Act and Exchange Act. The Company will use its best efforts to comply with all requirements imposed upon it by the Securities Act and the Exchange Act as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Placement Shares as contemplated by the provisions hereof and the Prospectus.

(x) No Offer to Sell. Other than the Prospectus, neither the Agent nor the Company (including its agents and representatives, other than the Agent in its capacity as such) will make, use, prepare, authorize, approve or refer to any written communication (as defined in Rule 405 under the Securities Act), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy Placement Shares hereunder.

(y) Sarbanes-Oxley Act. The Company and its subsidiaries will use their best efforts to comply with all effective applicable provisions of the Sarbanes-Oxley Act.

(z) New Registration Statement. If immediately prior to the third anniversary of the initial effective date of the Registration Statement, any of the Placement Shares remain unsold, the sale of the Placement Shares under this Agreement shall automatically be suspended unless and until the Company files a new shelf registration statement relating to the Placement Shares and such new registration statement is declared effective by the Commission. References herein to the Registration Statement shall include such new shelf registration statement. If any such new shelf registration statement becomes effective prior to the termination date of this Agreement, the Company agrees to notify the Agent of such effective date.

8. Conditions to the Agent's Obligations. The obligations of the Agent hereunder with respect to a Placement will be subject to the continuing accuracy and completeness of the representations and warranties made by the Company herein (other than those representations and warranties made as of a specified date or time), to the due performance by the Company of its obligations hereunder, to the completion by the Agent of a due diligence review satisfactory to the Agent in its reasonable judgment, and to the continuing reasonable satisfaction (or waiver by the Agent in its sole discretion) of the following additional conditions:

(a) Registration Statement Effective. The Registration Statement shall be effective and shall be available for the sale of all Placement Shares contemplated to be issued by any Placement Notice.

(b) Securities Act Filings Made. The Company shall have filed with the Commission the ATM Prospectus pursuant to Rule 424(b) under the Securities Act within the applicable time period prescribed for such filing by Rule 424(b) (without reliance on Rule 424(b)(8) of the Securities Act). All other filings with the Commission required by Rule 424 under the Securities Act to have been filed prior to the issuance of any Placement Notice hereunder shall have been made within the applicable time period prescribed for such filing by Rule 424.

(c) No Material Notices. None of the following events shall have occurred and be continuing: (i) receipt by the Company or any of its subsidiaries of any request for additional information from the Commission or any other federal or state governmental authority during the period of effectiveness of the Registration Statement, the response to which would require any post-effective amendments or supplements to the Registration Statement or the Prospectus; (ii) the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose; (iii) receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Placement Shares for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; (iv) the occurrence of any event that makes any material statement made in the Registration Statement or the Prospectus or any material document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, related Prospectus or such documents so that, in the case of the Registration Statement, it will not contain any materially 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 not misleading and, that in the case of the Prospectus, it will not contain any materially 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 the light of the circumstances under which they were made, not misleading, which changes shall not, as of the time of the Placement, have been so made.

(d) No Misstatement or Material Omission. Neither Agent shall have advised the Company that the Registration Statement or Prospectus, or any amendment or supplement thereto, contains an untrue statement of fact that in such Agent's reasonable opinion is material, or omits to state a fact that in such Agent's reasonable opinion is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(e) Material Changes. Except as contemplated in the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any Material Adverse Change or any development that could reasonably be expected to result in a Material Adverse Change, or any downgrading in or withdrawal of the rating assigned to any of the Company's securities (other than asset backed securities) by any rating organization or a public announcement by any rating organization that it has under surveillance or review its rating of any of the Company's securities (other than asset backed securities), the effect of which, in the case of any such action by a rating organization described above, in the reasonable judgment of the Agent (without relieving the Company of any obligation or liability it may otherwise have), is so material as to make it impracticable or inadvisable to proceed with the offering of the Placement Shares on the terms and in the manner contemplated by this Agreement and the Prospectus.

(f) Company Counsel Legal Opinion. The Agent shall have received the opinions and negative assurances of Company Counsel required to be delivered pursuant Section 7(q) on or before the date on which such delivery of such opinions and negative assurances is required pursuant to Section 7(q).

(g) Company IP Counsel Legal Opinion. The Agent shall have received the opinions and negative assurances of Company IP Counsel required to be delivered pursuant Section 7(q) on or before the date on which such delivery of such opinions and negative assurances is required pursuant to Section 7(q).

(h) Agent's Counsel Legal Opinion. The Agent shall have received from Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Agent, on or before the date on which the delivery of the Company Counsel legal opinion is required pursuant to Section 7(q), such opinions and negative assurances with respect to such matters as the Agent may reasonably require, and the Company shall have furnished to such counsel such documents as they request for enabling them to pass upon such matters.

(i) Comfort Letter. The Agent shall have received the Comfort Letter required to be delivered pursuant Section 7(r) on or before the date on which such delivery of such Comfort Letter is required pursuant to Section 7(r).

(j) Representation Certificate. The Agent shall have received the certificate required to be delivered pursuant to Section 7(p) on or before the date on which delivery of such certificate is required pursuant to Section 7(p).

(k) Secretary's Certificate. On or prior to the date the first Placement Notice is given hereunder, the Agent shall have received a certificate, signed on behalf of the Company by its corporate Secretary, certifying as to (i) the Certificate of Incorporation of the Company, (ii) the By-laws of the Company, (iii) the resolutions of the Board of Directors of the Company (or a committee thereof) authorizing the execution, delivery and performance of this Agreement and the issuance of the Placement Shares and (iv) the incumbency of the officers duly authorized to execute this Agreement and the other documents contemplated by this Agreement.

(l) No Suspension. Trading in the Common Stock shall not have been suspended on the Exchange and the Common Stock shall not have been delisted from the Exchange.

(m) Other Materials. On each date on which the Company is required to deliver a certificate pursuant to Section 7(p), the Company shall have furnished to the Agent such appropriate further opinions, certificates, letters and documents as the Agent may have reasonably requested and which are usually and customarily furnished by an issuer of securities in connection with a securities offering of the type contemplated hereby. All such opinions, certificates, letters and other documents shall have been in compliance with the provisions hereof. The Company will furnish the Agent with such conformed copies of such opinions, certificates, letters and other documents as the Agent shall have reasonably requested.

(n) Approval for Listing. The Placement Shares shall have been approved for listing on the Exchange, subject only to notice of issuance.

(o) No Termination Event. There shall not have occurred any event that would permit the Agent to terminate this Agreement pursuant to Section 11(a).

(p) FINRA. FINRA shall not have raised any objection with respect to the fairness or reasonableness of the terms and arrangements related to the sale of the Placement Shares pursuant to this Agreement.

9. Indemnification and Contribution

(a) Company Indemnification. The Company agrees to indemnify and hold harmless each Agent, its directors, officers, members, partners, and employees and agents and each person, if any, who controls any Agent within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, liabilities, expenses and damages (including, but not limited to, any and all reasonable investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(e)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which any Agent, or any such person, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based upon (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement thereto or in any free writing prospectus or in any application or other document executed by or on behalf of the Company or based on written information furnished by or on behalf of the Company filed in any jurisdiction in order to qualify the Common Stock under the securities laws thereof or filed with the Commission, (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading or (z) any breach by any of the indemnifying parties of any of their respective representations, warranties and agreements contained in this Agreement; *provided, however*, that this indemnity agreement shall not apply to the extent that such loss, claim, liability, expense or damage arises from the sale of the Placement Shares pursuant to this Agreement and is caused directly by an untrue statement or omission made in reliance upon and in conformity with written information relating to the Agent and furnished to the Company by the Agent expressly for inclusion in any document as described in clause (x) of this Section 9(a). This indemnity agreement will be in addition to any liability that the Company might otherwise have.

(b) Agent Indemnification. Each Agent, severally and not jointly, agrees to indemnify and hold harmless the Company and its directors and each officer of the Company that signed the Registration Statement, and each person, if any, who (i) controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or (ii) is controlled by or is under common control with the Company (each, a "Company Affiliate") from and against any and all losses, claims, liabilities, expenses and damages (including, but not limited to, any and all reasonable investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(c)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which any such Company Affiliate, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based upon (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement thereto, or (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading; *provided, however*, that this indemnity agreement shall apply only to the extent that such loss, claim, liability, expense or damage is caused directly by an untrue statement or omission made in reliance upon and in conformity with written information relating to such Agent and furnished to the Company by such Agent expressly for inclusion in any document as described in clause (x) of this Section 9(b), which the Company acknowledges consists solely of the material referred to in Schedule 5 hereto, as updated from time to time.

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture or material impairment of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) such that representation of such indemnified party and any indemnifying party(s) by the same counsel would be inappropriate under applicable standards of professional conduct (whether or not such representation by the same counsel has been proposed), or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable and documented out-of-pocket fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable and documented out-of-pocket fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such reasonable and documented out-of-pocket fees, disbursements and other charges will be reimbursed by the indemnifying party promptly after the indemnifying party receives a written invoice relating to the fees, disbursements and other charges in reasonable detail. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 9 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding.

(d) Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 9 is applicable in accordance with its terms but for any reason is held to be unavailable from the Company or the Agent, the Company and the Agent will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than the Agent, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) to which the Company and the Agents may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Agent on the other. The relative benefits received by the Company on the one hand and the Agent on the other shall be deemed to be in the same proportion as the total Net Proceeds from the sale of the Placement Shares (before deducting expenses) received by the Company bear to the total compensation received by each Agent from the sale of Placement Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and the Agent, on the other, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Agent, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Agent agree that it would not be just and equitable if contributions pursuant to this Section 9(d) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 9(d) shall be deemed to include, for the purpose of this Section 9(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 9(c) hereof. Notwithstanding the foregoing provisions of this Section 9(d), the Agent shall not be required to contribute any amount in excess of the commissions received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 9(d), any person who controls a party to this Agreement within the meaning of the Securities Act will have the same rights to contribution as that party (and any officers, directors, members, partners, employees or agents of the Agent and each broker dealer affiliate of the Agent will have the same rights to contribution as the Agent), and each officer of the Company who signed the Registration Statement and each director of the Company will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 9(d), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 9(d) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c) hereof. The Agent's respective obligations to contribute pursuant to this Section 9(d) are several in proportion to the respective number of Placement Shares they have sold hereunder, and not joint.

10. Representations and Agreements to Survive Delivery. The indemnity and contribution agreements contained in Section 9 of this Agreement and all representations and warranties of the Company and the Agent herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of the Agent, any controlling person of the Agent, or the Company (or any of their respective officers, directors, members or controlling persons), (ii) delivery and acceptance of the Placement Shares and payment therefor or (iii) any termination of this Agreement.

11. Termination.

(a) The Agent shall have the right by giving notice as hereinafter specified at any time to terminate this Agreement if (i) any Material Adverse Change, or any development that could reasonably be expected to result in a Material Adverse Change has occurred that, in the reasonable judgment of the Agent, may materially impair the ability of the Agent to sell the Placement Shares hereunder, (ii) the Company shall have failed, refused or been unable to perform any agreement on its part to be performed hereunder; *provided, however*, in the case of any failure of the Company to deliver (or cause another person to deliver) any certification, opinion, or letter required under Sections 7(p), 7(q), or 7(r), the Agent's right to terminate shall not arise unless such failure to deliver (or cause to be delivered) continues for more than thirty (30) days from the date such delivery was required, (iii) any other condition of the Agent's obligations hereunder is not fulfilled, or (iv) any suspension or limitation of trading in the Placement Shares or in securities generally on the Exchange shall have occurred (including automatic halt in trading pursuant to market-decline triggers, other than those in which solely program trading is temporarily halted), or a major disruption of securities settlements or clearing services in the United States shall have occurred, or minimum prices for trading have been fixed on the Exchange. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(i) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. If either Agent elects to terminate this Agreement as provided in this Section 11(a), such Agent shall provide the required notice as specified in Section 12 (Notices). For the avoidance of doubt, the termination by one Agent of its rights and obligations under this Agreement pursuant to this Section 11(a) shall not affect the rights and obligations of the other Agent under this Agreement.

(b) The Company shall have the right, by giving five (5) days' notice as hereinafter specified in Section 12, to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(i) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. Nothing in this Section 11(b) shall limit the ability of the Company to suspend offers and sales of Placement Shares pursuant to the provisions of Section 4.

(c) The Agent shall have the right, by giving five (5) days' notice as hereinafter specified in Section 12, to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(i) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. For the avoidance of doubt, the termination by one Agent of its rights and obligations under this Agreement pursuant to this Section 11(c) shall not affect the rights and obligations of the other Agent under this Agreement.

(d) Unless earlier terminated pursuant to this Section 11, this Agreement shall automatically terminate upon the issuance and sale of all of the Placement Shares to or through the Agent on the terms and subject to the conditions set forth herein; provided that the provisions of Section 7(i) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination.

(e) This Agreement shall remain in full force and effect unless terminated pursuant to Sections 11(a), (b), (c) or (d) above or otherwise by mutual agreement of the parties; *provided, however*, that any such termination by mutual agreement shall in all cases be deemed to provide that Section 7(i) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) shall remain in full force and effect. Upon termination of this Agreement, the Company shall not have any liability to the Agent for any discount, commission or other compensation with respect to any Placement Shares not otherwise sold by an Agent under this Agreement.

(f) Any termination of this Agreement shall be effective on the date specified in such notice of termination; *provided, however*, that such termination shall not be effective until the close of business on the date of receipt of such notice by the Agent or the Company, as the case may be, *provided, further*, that the Agent shall suspend any ongoing placement as soon as practicable following receipt of the notice of termination (and in any event by the close of business on the date of receipt). If such termination shall occur prior to the Settlement Date for any sale of Placement Shares, such termination shall not become effective until the close of business on such Settlement Date and such Placement Shares shall settle in accordance with the provisions of this Agreement.

12. Notices. All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing, unless otherwise specified, and if sent to the Agent, shall be delivered to:

Jefferies LLC
520 Madison Avenue
New York, NY 10022
Attention: Michael Magarro, Managing Director
Email: [***]

with copies (which shall not constitute notice) to:

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
666 Third Avenue
New York, New York 10017
Attention: Michael D. Maline, Esq.
Email: mdmaline@mintz.com

and if to the Company, shall be delivered to:

VolitionRx Limited
93-95 Gloucester Place
London W1U 6JQ
Attention: Cameron Reynolds
Email: [***]

with a copy (which shall not constitute notice) to:

Stradling Yocca Carlson & Rauth, P.C.
660 Newport Center Drive, Suite 1600
Newport Beach, CA 92660
Attention: Marc G. Alcsér, Esq.
Email: malcsér@stradlinglaw.com

Each party may change such address for notices by sending to the other party to this Agreement written notice of a new address for such purpose. Each such notice or other communication shall be deemed given (i) when delivered personally, by email, or by verifiable facsimile transmission (with an original to follow) on or before 4:30 p.m., New York City time, on a Business Day or, if such day is not a Business Day, on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which the Exchange and commercial banks in the City of New York are open for business.

An electronic communication ("**Electronic Notice**") shall be deemed written notice for purposes of this Section 12 if sent to the electronic mail address specified by the receiving party under separate cover. Electronic Notice shall be deemed received at the time the party sending Electronic Notice receives confirmation of receipt by the receiving party (other than pursuant to auto-reply). Any party receiving Electronic Notice may request and shall be entitled to receive the notice on paper, in a nonelectronic form ("**Nonelectronic Notice**") which shall be sent to the requesting party within ten (10) days of receipt of the written request for Nonelectronic Notice.

13. Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Company and the Agent and its respective successors and permitted assigns and, as to Section 5(b) and Section 9, the other indemnified parties specified therein. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any other person any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; *provided, however*, that any Agent may assign its rights and obligations hereunder to an affiliate of such Agent without obtaining the Company's consent.

14. Adjustments for Share Splits. The parties acknowledge and agree that all share-related numbers contained in this Agreement shall be adjusted to take into account any share split, share dividend or similar event effected with respect to the Common Stock.

15. Entire Agreement; Amendment; Severability. This Agreement (including all schedules and exhibits attached hereto and Placement Notices issued pursuant hereto) and any other writing entered into by the parties relating to this Agreement constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and the Agent. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement.

16. Applicable Law; Consent to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of New York, without regard to the principles of conflicts of laws. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection with any transaction contemplated hereby, 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 (certified or registered mail, return receipt requested) to such party at the address in effect for 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.

17. Waiver of Jury Trial. The Company and the Agent each hereby irrevocably waives any right it may have to a trial by jury in respect of any claim based upon or arising out of this Agreement or any transaction contemplated hereby.

18. Absence of Fiduciary Relationship. The Company acknowledges and agrees that:

(a) the Agent is acting solely as agent in connection with the sale of the Placement Shares contemplated by this Agreement and the process leading to such transactions, and no fiduciary or advisory relationship between the Company or any of its respective affiliates, stockholders (or other equity holders), creditors or employees or any other party, on the one hand, and the Agent, on the other hand, has been or will be created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Agent has advised or is advising the Company on other matters, and the Agent has no obligation to the Company with respect to the transactions contemplated by this Agreement, except the obligations expressly set forth in this Agreement and in any schedule or exhibit attached hereto;

(b) the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) the Agent has not provided any legal, accounting, regulatory or tax advice with respect to the transactions contemplated by this Agreement, and the Company has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate;

(d) the Company has been advised and is aware that the Agent and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Agent have no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

(e) the Company waives, to the fullest extent permitted by law, any claims it may have against the Agent, for breach of fiduciary duty or alleged breach of fiduciary duty in connection with the sale of Placement Shares under this Agreement and agrees that the Agent shall have no liability (whether direct or indirect, in contract, tort or otherwise) to the Company in respect of such a fiduciary claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, partners, employees or creditors of the Company.

19. Use of Information. The Agent may not disclose any information gained in connection with this Agreement and the transactions contemplated by this Agreement, including due diligence, to any third party other than its legal counsel advising it on this Agreement unless expressly approved by the Company in writing.

20. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement by one party to the other may be made by facsimile transmission or email of a .pdf attachment.

21. Effect of Headings: Knowledge of the Company. The section and Exhibit headings herein are for convenience only and shall not affect the construction hereof. All references in this Agreement to the “knowledge of the Company” or the “Company’s knowledge” or similar qualifiers shall mean the actual knowledge of the directors and executive officers of the Company.

22. Press Releases and Disclosure. The Company may issue a press release describing the material terms of the transactions contemplated hereby as soon as practicable following the date of this Agreement, and may file with the Commission a Current Report on Form 8-K, with this Agreement attached as an exhibit thereto, describing the material terms of the transactions contemplated hereby, and the Company shall consult with the Agent prior to making such disclosures, and the parties hereto shall use all commercially reasonable efforts, acting in good faith, to agree upon a text for such disclosures that is reasonably satisfactory to all parties hereto. No party hereto shall issue thereafter any press release or like public statement (including, without limitation, any disclosure required in reports filed with the Commission pursuant to the Exchange Act) related to this Agreement or any of the transactions contemplated hereby without the prior written approval of the other party hereto (such approval not to be unreasonably withheld or delayed), except to the extent such information was previously released publicly or as may be necessary or appropriate in the reasonable opinion of the party seeking to make disclosure to comply with the requirements of applicable law or stock exchange rules. If any such press release or like public statement is so required, the party making such disclosure shall consult with the other party prior to making such disclosure, and the parties shall use all commercially reasonable efforts, acting in good faith, to agree upon a text for such disclosure that is reasonably satisfactory to all parties hereto; provided, however, that nothing contained herein shall be construed to restrict the Company from making disclosures that, in the opinion of the Company’s legal counsel, are required pursuant to applicable law or stock exchange rules.

23. Research Analyst Independence. The Company acknowledges that the Agent’s research analysts and research departments are required to and should be independent from their respective investment banking divisions and are subject to certain regulations and internal policies, and as such the Agent’s research analysts may hold views and make statements or investment recommendations and/or publish research reports with respect to the Company or the offering that differ from the views of their respective investment banking divisions. The Company understands that the Agent is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short positions in debt or equity securities of the companies that may be the subject of the transactions contemplated by this Agreement.

24. Definitions. As used in this Agreement, the following term has the meaning set forth below:

(a) “**Applicable Time**” means the date of this Agreement, each Representation Date, each date on which a Placement Notice is given, each Point of Sale, and each Settlement Date.

(b) “**Designated Agent**” means, as of any given time, an Agent that the Company has designated as sales agent to sell Placement Shares pursuant to the terms of this Agreement.

[Remainder of Page Intentionally Blank]

If the foregoing correctly sets forth the understanding between the Company and the Agent, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between the Company and the Agent.

Very truly yours,

VOLITIONRX LIMITED

By: /s/ Cameron Reynolds

Name: Cameron Reynolds

Title: President and Chief Executive Officer

ACCEPTED as of the date first-above written:

JEFFERIES LLC

By: /s/ Michael Magarro

Name: Michael Magarro

Title: Managing Director

SCHEDULE 1

FORM OF PLACEMENT NOTICE

From: VolitionRx Limited
To: Jefferies LLC
Attention:
Subject: At-The-Market Offering-Placement Notice

Gentlemen:

Attn: [_____]

Reference is made to the Equity Distribution Agreement between _____ (the "**Company**") and Jefferies LLC (the "**Agent**") dated as of May [____], 2022. The Company confirms that all conditions to the delivery of this Issuance Notice are satisfied as of the date hereof.

Date of Delivery of Issuance Notice (determined pursuant to Section 3(b)(i)): _____

Issuance Amount (equal to the total Sales Price for such Shares): \$ _____

Number of days in selling period: _____

First date of selling period: _____

Last date of selling period: _____

Settlement Date(s) if other than standard T+2 settlement: _____

Floor Price Limitation: \$ ____ per share

Comments: _____

By: _____
Name:
Title:

SCHEDULE 2

Notice Parties

VolitionRx Limited

Cameron Reynolds [***]
Dr. Martin Faulkes [***]

With a copy to [***] and malcser@stradlinglaw.com

Jefferies LLC

Michael Magarro [***]

With a copy to mdmaline@mintz.com

SCHEDULE 3

Compensation

The Agents shall be paid compensation equal to 3% of the gross proceeds from the sales of Placement Shares pursuant to the terms of this Agreement and shall be reimbursed for certain expenses in accordance with Section 7(i) of this Agreement.

The foregoing rate of compensation shall not apply when the Agents act as principal, in which case the Company may sell the Placement Shares to the Agents as principal at a price agreed upon at the relevant Point of Sale pursuant to the applicable Placement Notice.

SCHEDULE 4

Schedule of Subsidiaries

Name of Subsidiary	State or other Jurisdiction of Incorporation or Organization
Singapore Volition Pte. Limited, a private company limited by shares	Singapore
Volition Global Services SRL, a private limited company	Belgium
Belgian Volition SRL, a private limited company	Belgium
Volition Diagnostics UK Limited, a limited company incorporated and registered in England and Wales	United Kingdom
Volition America, Inc., a Delaware corporation	Delaware
Volition Veterinary Diagnostics Development LLC, a Texas limited liability company	Texas
Volition Germany GmbH (formerly Octamer GmbH), a company with limited liability organized under the laws of Germany	Germany

SCHEDULE 5

Information Provided By Agents

The parties acknowledge and agree that, for purposes of Section 6(b) and Section 9(b) of this Agreement, there is no information provided by the Agents.

The information in this Schedule shall be updated from time to time in connection with the filing of a new Prospectus or otherwise as necessary.

EXHIBIT 7(P)

REPRESENTATION DATE CERTIFICATE

VOLITIONRX LIMITED

REPRESENTATION DATE CERTIFICATE

_____, 202_ _

The undersigned, the duly qualified, appointed and acting President and Chief Executive Officer of **VOLITIONRX LIMITED**, a Delaware corporation (the "**Company**"), does hereby certify in such capacity and on behalf of the Company, pursuant to Section 7(p) of the Equity Distribution Agreement, dated May 20, 2022 (the "**Equity Distribution Agreement**"), by and between the Company and Jefferies LLC, that:

1. The representations and warranties of the Company in Section 6 of the Equity Distribution Agreement (A) to the extent such representations and warranties are subject to qualifications and exceptions contained therein relating to materiality or Material Adverse Change, are true and correct on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof, except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, (B) to the extent such representations and warranties are not subject to any qualifications or exceptions, are true and correct in all material respects as of the date hereof as if made on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, and (C) are subject to the clarification that the Company issued a warrant to purchase up to 54,000 shares of Common Stock as an inducement to employment in April 2022;
2. The Company has complied in all material respects with all agreements and satisfied in all material respects all conditions on its part to be performed or satisfied pursuant to the Equity Distribution Agreement at or prior to the date hereof;
3. As of the date hereof, (i) neither the Registration Statement nor the Prospectus contain any untrue statement of a material fact or omit 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 and (ii) to the Company's knowledge, no event has occurred as a result of which it is necessary to amend or supplement the Registration Statement or the Prospectus in order to make the statements therein not untrue or misleading for clause (i) above, to be true and correct;
4. There has been no Material Adverse Change since the date as of which information is given in the Prospectus (including documents incorporated therein), as amended or supplemented;

5. As of the date hereof, the Company does not possess any material non-public information; and
6. The aggregate offering price of the Placement Shares that may be issued and sold pursuant to the Equity Distribution Agreement and the maximum number or amount of Placement Shares that may be sold pursuant to the Equity Distribution Agreement have been duly authorized by the Company's board of directors or a duly authorized committee thereof.

Terms used herein and not defined herein have the meanings ascribed to them in the Equity Distribution Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, I have signed this Representation Date Certificate as of the date first set forth above.

VOLITIONRX LIMITED

By: _____
Name: Cameron Reynolds
Title: President and Chief Executive Officer



Stradling Yocca Carlson & Rauth
A Professional Corporation
660 Newport Center Drive, Suite 1600
Newport Beach, CA 92660-6422
949 725 4000
stradlinglaw.com

May 20, 2022

VolitionRx Limited
13215 Bee Cave Parkway
Suite 125, Galleria Oaks B
Austin, Texas 78738

Re: VolitionRx Limited Registration Statement on Form S-3 (File No. 333-259783)

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the proposed offer and sale by VolitionRx Limited, a Delaware corporation (the "**Company**"), of up to an aggregate of \$25,000,000 of shares of the Company's common stock, par value \$0.001 per share (the "**Shares**"), pursuant to a registration statement on Form S-3, as amended (File No. 333-259783) (the "**Registration Statement**"), filed with, and declared effective by, the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Securities Act**"), the base prospectus filed November 8, 2021 contained in the Registration Statement (the "**Base Prospectus**"), and the prospectus supplement relating to the proposed offer and sale of the Shares filed with the Commission on May 20, 2022 pursuant to Rule 424(b) of the rules and regulations of the Securities Act (the "**Prospectus Supplement**" and together with the Base Prospectus, the "**Prospectus**"). We understand that the Shares are proposed to be offered and sold by the Company through Jefferies LLC pursuant to that certain Equity Distribution Agreement, dated as of May 20, 2022, by and between Jefferies LLC and the Company (the "**Sales Agreement**").

In connection with the preparation of this opinion, we have examined such documents and considered such questions of law as we have deemed necessary or appropriate. We have assumed the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof and the genuineness of all signatures. As to questions of fact material to our opinions, we have relied upon the certificates of certain officers of the Company.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued and sold in the manner described in the Registration Statement, the Prospectus and the Sales Agreement, will be validly issued, fully paid and non-assessable.

We are opining herein as to the effect on the subject transaction only of the General Corporation Law of the State of Delaware, and we express no opinion with respect to the applicability thereto, or the effect thereon, of the laws of any other jurisdiction.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Current Report on Form 8-K of the Company filed with Commission on the date hereof, which is incorporated by reference into the Registration Statement, and further consent to the use of our name under the caption "**Legal Matters**" in the Prospectus. In giving such consent, we do not hereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

This opinion is intended solely for use in connection with the issuance and sale of the Shares pursuant to the Registration Statement and the Prospectus and is not to be relied upon for any other purpose or delivered to or relied upon by any other person without our prior written consent. This opinion is rendered as of the date hereof and based solely on our understanding of facts in existence as of such date after the examination described in this opinion. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention whether or not such occurrence would affect or modify the opinions expressed herein.

Very truly yours,

/s/ Stradling Yocca Carlson & Rauth, P.C.

Stradling Yocca Carlson & Rauth, P.C.