

**PROSPECTUS SUPPLEMENT DATED FEBRUARY 19, 2021  
(to the Prospectus dated October 28, 2020)**

**RespireRx Pharmaceuticals Inc.**

This Prospectus Supplement No. 4 supplements and amends the final prospectus dated October 28, 2020 (as previously supplemented by Prospectus Supplement Nos. 1, 2, and 3, the “Final Prospectus”) relating to the resale of up to 115,000,000 shares of our common stock, \$0.001 par value per share, issuable to White Lion Capital, LLC (the “Selling Stockholder”), pursuant to a “put right” under an equity purchase agreement, dated July 28, 2020, as amended, by and between us and the Selling Stockholder. This Prospectus Supplement No. 4 should be read in conjunction with the Final Prospectus and is qualified by reference to the Final Prospectus except to the extent that the information in this Prospectus Supplement No. 4 supersedes the information contained in the Final Prospectus.

On February 19, 2021, we filed with the U.S. Securities and Exchange Commission the attached Current Report on Form 8-K.

Our Common Stock is quoted by the OTCQB Venture Market operated by the OTC Markets Group, Inc. (“OTCQB”) under the symbol “RSPI.” On January 5, 2021, the Company effected a ten-to-one reverse stock split of all of the outstanding shares of Common Stock of the Company (the “Reverse Split”). The share numbers presented throughout the Final Prospectus for periods prior to the effectiveness of the Reverse Split do not reflect the Reverse Split. On February 18, 2021, the closing price of our Common Stock was \$0.044 per share and there were 80,146,039 shares of our Common Stock outstanding, on a post-Reverse Split basis.

**Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “Risk Factors” beginning on page 7 of the Final Prospectus, and under similar headings in any amendments or supplements to this prospectus.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

The date of this Prospectus Supplement No. 4 is February 19, 2021

---

**Washington, D.C. 20549**

## Current Report

**Date of Report (Date of earliest event reported): February 17, 2021**

**(Exact name of registrant as specified in its charter)**

**07452**  
**(Zip Code)**

**(Former name or former address, if changed since last report.)**

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

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.**

Securities Purchase Agreement

On February 17, 2021 (the “Effective Date”), RespireRx Pharmaceuticals Inc. (the “Company”) and FirstFire Global Opportunities Fund LLC (the “Lender”) entered into a Securities Purchase Agreement (the “SPA”) by which the Lender provided a sum of \$100,000 (the “Consideration”) to the Company, in return for a convertible promissory note (the “Note”) with a face amount of \$112,000 (which difference in value as compared to the Consideration is due to an original issue discount of \$12,000) and 2,000,000 commitment shares (the “Commitment Shares”) of the Company’s common stock, par value \$0.001 (“Common Stock”). In addition, and to induce the Lender to enter into the SPA, the Company and the Lender entered into a Piggy-Back Registration Rights Agreement (the “Registration Rights Agreement”) under which the Company has agreed to provide certain piggy-back registration rights under the Securities Act of 1933, as amended (the “1933 Act”) with respect to the Common Stock issuable pursuant to the SPA. The net proceeds of the Consideration, which were received by the Company on February 19, 2021 (the “Closing Date”), equal \$97,500 after payment of \$2,500 in Lender’s legal fees, and will be used for general corporate purposes.

Pursuant to the terms of the SPA and the Note, the Lender paid the Consideration to the Company on the Closing Date. The Note obligates the Company to pay interest at a rate of 10% per annum on any unpaid principal beginning on the Closing Date. The maturity date of the note is November 17, 2021, at which time a final payment equal to the principal amount plus any accrued and unpaid interest and other fees will become due. In the event of a default by the Company, the default interest rate will be the lesser of 24% or the maximum amount permitted by law. Additionally, if during the term of the Note the Company fails to meet its reporting obligations under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), the Company will be subject to a \$3,000 penalty for each day that such failure persists, and if not timely paid, 2% interest per month on such amount.

The Company is required under the SPA to file a Form 1-A under Regulation A of the 1933 Act within sixty days of the Effective Date (the “Reg A Offering”) listing the Lender as a selling stockholder with respect to the shares of Common Stock underlying any of the outstanding notes and securities between the Lender and the Company, including, but not limited to, the Note and the Commitment Shares (collectively, the “Lender Securities”). If the Lender Securities are not included for sale in the Reg A Offering, then the Registration Rights Agreement will require such shares to be registered for sale in one of the next three registration statements filed by Company, subject to the permissibility of such inclusion under the 1933 Act and the Exchange Act, and the rules and regulations promulgated thereunder.

---

The Lender has the right, at any time after 180 days from the Effective Date, to convert any outstanding and unpaid amount of the Note into shares of Common Stock or securities convertible into Common Stock, provided that such conversion would not result in the Lender beneficially owning more than 4.99% of the Company’s then outstanding shares of Common Stock. Subject to certain limitations and adjustments as described in the Note, the Lender may convert at a per share conversion price equal to \$0.02 (the “Fixed Conversion Price”), provided that upon any Event of Default (as defined in the Note), the per share conversion price will equal \$0.01. Additionally, in the event the Company has a DTC “Chill” on its shares, an additional discount of 10% will apply to the conversion price while the “Chill” is in effect. Upon a conversion, all rights with respect to the portion of the Note being so converted terminate, except for the right to receive the Company’s Common Stock or other securities, cash or other assets as provided in the Note due upon such conversion.

The Company may, with prior written notice to the Lender, prepay the outstanding principal amount under the Note at any time after the Effective Date by making a payment to the Lender of an amount in cash equal to 115% of the outstanding principal, interest, default interest and other amounts owed.

The SPA provides the lender with certain participation rights in any subsequent offering of debt or equity. Under the SPA, the Company may not enter into an offering of its securities with terms that would benefit an investor more than the Lender is benefited under the SPA and the agreements ancillary thereto, unless the Company offers the Lender those same terms.

The Commitment Shares to be issued and sold to the Lender pursuant to the SPA, the Note and the shares of the Company’s Common Stock issuable upon conversion thereof are offered and sold to the Lender in reliance upon specific exemptions from the registration requirements of United States federal and state securities laws, which include Section 4(a)(2) of the 1933 Act, and Rule 506(b) promulgated by the SEC under the 1933 Act. Pursuant to these exemptions, the Lender represented to the Company under the SPA, among other representations, that it was an “accredited investor” as that term is defined in Rule 501(a) of Regulation D under the 1933 Act.

The descriptions of the SPA, the Registration Rights Agreement, the Note and the additional associated documents do not purport to be complete. The descriptions of the SPA, the Registration Rights Agreement, and the Note are qualified in their entirety by reference to the SPA, the Registration Rights Agreement, and the Note, which are included as Exhibit 99.1, Exhibit 99.2, and Exhibit 99.3, respectively, to this Current Report on Form 8-K and are incorporated herein by reference.

**Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.**

The information provided in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 2.03.

---

**Item 3.02. Unregistered Sales of Equity Securities.**

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

**Item 9.01 Financial Statements and Exhibits**

(d) Exhibits.

Exhibit Number	Exhibit Description
99.1	<a href="#">Securities Purchase Agreement, dated February 17, 2021, between RespireRx Pharmaceuticals Inc. and FirstFire Global Opportunities Fund, LLC.</a>
99.2	<a href="#">Piggy-Back Registration Rights Agreement, dated February 17, 2021, between RespireRx Pharmaceuticals Inc. and FirstFire Global Opportunities Fund, LLC.</a>
99.3	<a href="#">Convertible Promissory Note, dated February 17, 2021.</a>

---

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

Date: February 19, 2021

RESPIRERX PHARMACEUTICALS INC.  
(Registrant)

By: /s/ Jeff E. Margolis  
Jeff E. Margolis  
SVP, CFO, Secretary and Treasurer

---

**SECURITIES PURCHASE AGREEMENT**

This **SECURITIES PURCHASE AGREEMENT** (the “Agreement”), dated as of February 17, 2021, by and between **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation, with headquarters located at 126 Valley Road, Suite C, Glen Rock, New Jersey 07452 (the “Company”), and **FIRSTFIRE GLOBAL OPPORTUNITIES FUND, LLC**, a Delaware limited liability company, with its address at 1040 First Avenue, Suite 190, New York, NY 10022 (the “Buyer”).

**WHEREAS:**

A. The Company and the Buyer are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “1933 Act”) and Rule 506(b) promulgated by the United States Securities and Exchange Commission (the “SEC”) under the 1933 Act;

B. Buyer desires to purchase from the Company, and the Company desires to issue and sell to the Buyer, upon the terms and conditions set forth in this Agreement, a Convertible Promissory Note of the Company, in the aggregate principal amount of \$112,000.00 (as the principal amount thereof may be increased pursuant to the terms thereof, and together with any note(s) issued in replacement thereof or as a dividend thereon or otherwise with respect thereto in accordance with the terms thereof, in the form attached hereto as Exhibit A (the “Note”), convertible into shares of common stock of the Company (the “Common Stock”), upon the terms and subject to the limitations and conditions set forth in such Note; and

C. Company desires to issue to the Buyer, upon the terms and conditions set forth in this Agreement, two million (2,000,000) shares of common stock (“Commitment Shares”) upon the terms and subject to the limitations and conditions set forth herein;

**NOW THEREFORE**, in consideration of the foregoing and of the agreements and covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Buyer hereby agree as follows:

1. Purchase and Sale of Note and Commitment Shares.

a. Purchase of Note and Commitment Shares. On the Closing Date (as defined below), the Company shall issue and sell to the Buyer and the Buyer agrees to purchase from the Company the Note and the Commitment Shares, subject to the express terms of the Note, the Commitment Shares, and this Agreement as the case may be.

b. Form of Payment. On the Closing Date, the Buyer shall pay the purchase price of \$100,000.00 (the “Purchase Price”) for the Note, by wire transfer of immediately available funds, in accordance with the Company’s written wiring instructions, against delivery of the Note and the Commitment Shares, and the Company shall deliver such duly executed Note and Commitment Shares on behalf of the Company, to the Buyer.

c. Closing Date. Subject to the satisfaction (or written waiver) of the conditions thereto set forth in Section 6 and Section 7 below, the date and time of the issuance and sale of the Note and Commitment Shares pursuant to this Agreement (the “Closing Date”) shall be 4:00 PM, Eastern Time on the date first written above, or such other mutually agreed upon time.

d. Closing. The closing of the transactions contemplated by this Agreement (the “Closing”) shall occur on the Closing Date at such location as may be agreed to by the parties (including via exchange of electronic signatures).

2. Buyer's Representations and Warranties. The Buyer represents and warrants to the Company as of the Closing Date that:

a. Investment Purpose. As of the Closing Date, the Buyer is purchasing the Note and Commitment Shares and the shares of Common Stock issuable upon conversion of the Note and such additional shares of Common Stock, if any, as are issuable on account of interest on the Note and Commitment Shares pursuant to this Agreement, such shares of Common Stock being collectively referred to herein as the "Conversion Shares" and, collectively with the Note and Commitment Shares, the "Securities") for its own account and not with a present view towards the public sale or distribution thereof, except pursuant to sales registered or exempted from registration under the 1933 Act; provided, however, that by making the representations herein, the Buyer does not agree to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act.

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

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

d. Information. The Buyer and its advisors, if any, have been, and for so long as any of the Securities remain outstanding will continue to be, furnished with all materials relating to the business, finances, and operations of the Company and materials relating to the offer and sale of the Securities which have been requested by the Buyer or its advisors. The Buyer and its advisors, if any, have been, and for so long as the Note or Commitment Shares remains outstanding will continue to be, afforded the opportunity to ask questions of the Company regarding its business and affairs. Notwithstanding the foregoing, the Company has not disclosed to the Buyer any material non-public information regarding the Company or otherwise, and will not disclose such information unless such information is disclosed to the public prior to or promptly following such disclosure to the Buyer. Neither such inquiries nor any other due diligence investigation conducted by Buyer or any of its advisors or representatives shall modify, amend or affect Buyer's right to rely on the Company's representations and warranties contained in Section 3 below.

e. Governmental Review. The Buyer understands that no United States federal or state agency or any other government or governmental agency has passed upon or made any recommendation or endorsement of the Securities.

f. Transfer or Re-sale. The Buyer understands that (i) the sale or resale of the Securities have not been, and as of the Issue Date, are currently not being registered under the 1933 Act or any applicable state securities laws, and the Securities may not be transferred unless (a) the Securities are sold pursuant to an effective registration statement under the 1933 Act; (b) the Buyer shall have delivered to the Company, at the cost of the Company, an opinion of counsel (which may be the Legal Counsel Opinion (as defined below)) that shall be in form, substance, and scope customary for opinions of counsel in comparable transactions to the effect that the Securities to be sold or transferred may be sold or transferred pursuant to an exemption from such registration, which opinion shall be accepted by the Company; (c) the Securities are sold or transferred to an "affiliate" (as defined in Rule 144 promulgated under the 1933 Act (or a successor rule) ("Rule 144")) of the Buyer who agrees to sell or otherwise transfer the Securities only in accordance with this Section 2(f) and who is an Accredited Investor; (d) the Securities are sold pursuant to Rule 144 or other applicable exemption; or (e) the Securities are sold pursuant to Regulation S under the 1933 Act (or a successor rule) ("Regulation S"), and the Buyer shall have delivered to the Company, at the cost of the Company, an opinion of counsel that shall be in form, substance and scope customary for opinions of counsel in corporate transactions, which opinion shall be accepted by the Company; (ii) any sale of such Securities made in reliance on Rule 144 may be made only in accordance with the terms of said Rule and further, if said Rule is not applicable, any re-sale of such Securities under circumstances in which the seller (or the person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other person is under any obligation to register such Securities under the 1933 Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder (in each case).



g. Legends. The Buyer understands that until such time as the Note, and, upon conversion of the Note in accordance with its respective terms, the Conversion Shares, have been registered under the 1933 Act or may be sold pursuant to Rule 144 under the 1933 Act or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, the Securities may bear a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of the certificates for such Securities):

**“NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES MAY BE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”**

The legend set forth above shall be removed and the Company shall issue a certificate for the applicable shares of Common Stock without such legend to the holder of any Security upon which it is stamped or (as requested by such holder) issue the applicable shares of Common Stock to such holder by electronic delivery by crediting the account of such holder’s broker with The Depository Trust Company (“**DTC**”), if, unless otherwise required by applicable state securities laws, (a) such Security is registered for sale under an effective registration statement filed under the 1933 Act or otherwise may be sold pursuant to Rule 144 or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold; or (b) the Company or the Buyer provides the Legal Counsel Opinion (as contemplated by and in accordance with Section 4(m) hereof) to the effect that a public sale or transfer of such Security may be made without registration under the 1933 Act, which opinion shall be accepted by the Company so that the sale or transfer is effected. The Company shall be responsible for the fees of its transfer agent and all DTC fees associated with any such issuance. The Buyer agrees to sell all Securities, including those represented by a certificate(s) from which the legend has been removed, in compliance with applicable prospectus delivery requirements, if any.

h. Authorization; Enforcement. This Agreement has been duly and validly authorized by the Buyer and has been duly executed and delivered on behalf of the Buyer, and this Agreement constitutes a valid and binding agreement of the Buyer enforceable in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally and except as may be limited by the exercise of judicial discretion in applying principles of equity.

i. Manipulation of Price. The Buyer has not, and to its knowledge no one acting on its behalf has: (i) taken, directly or indirectly, any action designed to cause or to result, or that could reasonably be expected to cause or result, in the stabilization or manipulation of the price of any security of the Company; (ii) bid for, purchased, or paid any compensation for soliciting purchases of, any Stock in the open market; or (iii) paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.

j. No Shorting. Buyer and its affiliates shall be prohibited from engaging directly or indirectly in any short selling or hedging transactions with respect to any securities of the Company while this Note is outstanding.

3. Representations and Warranties of the Company. The Company represents and warrants to the Buyer as of the Closing Date that:

a. Organization and Qualification. The Company and each of its Subsidiaries, not including any subsidiaries with respect to which lack of good standing or valid existence would not have a Material Adverse Effect on the Company and its Subsidiaries (as defined below), if any, is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, with full power and authority (corporate and other) to own, lease, use and operate its properties and to carry on its business as and where now owned, leased, used, operated and conducted. Schedule 3(a), if attached hereto, sets forth a list of all of the Subsidiaries of the Company and the jurisdiction in which each is incorporated. The Company and each of its Subsidiaries is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which its ownership or use of property or the nature of the business conducted by it makes such qualification necessary except where the failure to be so qualified or in good standing would not have a Material Adverse Effect. "Material Adverse Effect" means any material adverse effect on the business, operations, assets, financial condition or prospects of the Company or its Subsidiaries, if any, taken as a whole, or on the transactions contemplated hereby or by the agreements or instruments to be entered into in connection herewith. "Subsidiaries" means any corporation or other organization, whether incorporated or unincorporated, in which the Company owns, directly or indirectly, any equity or other ownership interest greater than fifty percent (50%).

b. Authorization; Enforcement. (i) The Company has all requisite corporate power and authority to enter into and perform this Agreement, the Note, and to consummate the transactions contemplated hereby and thereby and to issue the Securities, in accordance with the terms hereof and thereof; (ii) the execution and delivery of this Agreement, the Note and the Commitment Shares by the Company and the consummation by it of the transactions contemplated hereby and thereby (including without limitation, the issuance of the Note and Commitment Shares, as well as the issuance and reservation for issuance of the Conversion Shares issuable upon conversion of the Note) have been duly authorized by the Company's Board of Directors and no further consent or authorization of the Company, its Board of Directors, its shareholders, or its debt holders is required; (iii) this Agreement, the Note, and the Commitment Shares (together with any other instruments executed in connection herewith or therewith) have been duly executed and delivered by the Company by its authorized representative, and such authorized representative is the true and official representative with authority to sign this Agreement, the Note, the Commitment Shares and the other instruments documents executed in connection herewith or therewith and bind the Company accordingly; and (iv) this Agreement constitutes, and upon execution and delivery by the Company of the Note and the Commitment Shares, each of such instruments will constitute, a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with their terms.

c. Capitalization; Governing Documents. As of February 10, 2021, the authorized capital stock of the Company consists of: 2,000,000,000 authorized shares of Common Stock, of which 76,646,039 shares were issued and outstanding. All of such outstanding shares of capital stock of the Company and the Conversion Shares, are, or upon issuance will be, duly authorized, validly issued, fully paid and non-assessable. No shares of capital stock of the Company are subject to preemptive rights or any other similar rights of the shareholders of the Company or any liens or encumbrances imposed through the actions or failure to act of the Company other than those shares that are reserved for issuance upon conversion this Note, upon its issuance, or other similar convertible notes, or warrants or options as may be appropriate or with respect to equity or option plans and those that may relate to rights of participation or rights to adjust terms to more favorable terms. As of the effective date of this Agreement, other than as publicly announced prior to such date and reflected in the SEC Documents (as defined in this Agreement) of the Company (i) there are no outstanding options, warrants, scrip, rights to subscribe for, puts, calls, rights of first refusal, agreements, understandings, claims or other commitments or rights of any character whatsoever relating to, or securities or rights convertible into or exchangeable for any shares of capital stock of the Company or any of its Subsidiaries, or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries; (ii) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of its or their securities under the 1933 Act; and (iii) there are no anti-dilution or price adjustment provisions contained in any security issued by the Company (or in any agreement providing rights to security holders) that will be triggered by the issuance of any of the Securities. The Company has furnished to the Buyer true and correct copies of the Company's Certificate of Incorporation as in effect on the date hereof ("Certificate of Incorporation"), the Company's Bylaws, as in effect on the date hereof (the "Bylaws"), and the terms of all securities convertible into or exercisable for Common Stock of the Company and the material rights of the holders thereof in respect thereto.

d. Issuance of Conversion Shares. The Conversion Shares are duly authorized and reserved for issuance and, upon conversion of the Note in accordance with its terms, will be validly issued, fully paid and non- assessable, and free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of shareholders of the Company and will not impose personal liability upon the holder thereof.

e. No Broker-Dealer Acknowledgement. Absent a final adjudication from a court of competent jurisdiction stating otherwise, so long as any amount on the Note remains outstanding, the Company shall not to any person, institution, governmental or other entity, state, claim, allege, or in any way assert, that Holder is currently, or ever has been a broker-dealer under the Securities Exchange Act of 1934.

f. Acknowledgment of Dilution. The Company understands and acknowledges the potentially dilutive effect of the Conversion Shares to the Common Stock upon the conversion of the Note. The Company further acknowledges that its obligation to issue, upon conversion of the Note, the Conversion Shares, in accordance with this Agreement, the Note, and the Commitment Shares are absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other shareholders of the Company.

g. Ranking; No Conflicts. The execution, delivery and performance of this Agreement, the Note, and the Commitment Shares by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance and reservation for issuance of the Conversion Shares) will not (i) conflict with or result in a violation of any provision of the Certificate of Incorporation or Bylaws; or (ii) violate or conflict with, or result in a breach of any provision of, or constitute a default (or an event which with notice or lapse of time or both could become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, note, evidence of indebtedness, indenture, patent, patent license or instrument to which the Company or any of its Subsidiaries is a party; or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and regulations of any self-regulatory organizations to which the Company or its securities is subject) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company or any of its Subsidiaries is bound or affected (except for such conflicts, defaults, terminations, amendments, accelerations, cancellations and violations as would not, individually or in the aggregate, have a Material Adverse Effect); or (iv) trigger any anti-dilution and/or ratchet provision contained in any other contract in which the Company is a party thereto or any security issued by the Company. Neither the Company nor any of its Subsidiaries is in violation of its Certificate of Incorporation, Bylaws or other organizational documents and neither the Company nor any of its Subsidiaries is in default (and no event has occurred which with notice or lapse of time or both could put the Company or any of its Subsidiaries in default) under, and neither the Company nor any of its Subsidiaries has taken any action or failed to take any action that would give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or any of its Subsidiaries is a party or by which any property or assets of the Company or any of its Subsidiaries is bound or affected, except for possible defaults as would not, individually or in the aggregate, have a Material Adverse Effect. The businesses of the Company and its Subsidiaries, if any, are not being conducted, and shall not be conducted so long as the Buyer owns any of the Securities, in violation of any law, ordinance or regulation of any governmental entity. Except as specifically contemplated by this Agreement and as required under the 1933 Act and any applicable state securities laws, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court, governmental agency, regulatory agency, self-regulatory organization or stock market or any third party in order for it to execute, deliver or perform any of its obligations under this Agreement and the Note in accordance with the terms hereof or thereof or to issue and sell the Note in accordance with the terms hereof and, upon conversion of the Note, issue Conversion Shares. All consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the date hereof. The Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing.

h. SEC Documents; Financial Statements. The Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “1934 Act”) (all of the foregoing filed prior to the date hereof and all exhibits included therein and financial statements and schedules thereto and documents (other than exhibits to such documents) incorporated by reference therein, being hereinafter referred to herein as the “SEC Documents”). As of their respective dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. None of the statements made in any such SEC Documents is, or has been, required to be amended or updated under applicable law (except for such statements as have been amended or updated in subsequent filings on or prior the date hereof). As of their respective dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with United States generally accepted accounting principles, consistently applied, during the periods involved and fairly present in all material respects the consolidated financial position of the Company and its consolidated Subsidiaries as of the dates thereof and the consolidated results of their operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). Except as set forth in SEC Documents or the financial statements of the Company included in the SEC Documents, the Company has no liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to September 30, 2020, and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in such financial statements, which, individually or in the aggregate, are not material to the financial condition or operating results of the Company. The Company is subject to the reporting requirements of the 1934 Act. The Company has never been a “shell company” as described in Rule 144(i)(1)(i).

i. Absence of Certain Changes. Since September 30, 2020, there has been no material adverse change and no material adverse development in the assets, liabilities, business, properties, operations, financial condition, results of operations, prospects or 1934 Act reporting status of the Company or any of its Subsidiaries.

j. Absence of Litigation. Other than as disclosed in the SEC Documents, there is no action, suit, claim, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Subsidiaries, threatened against or affecting the Company or any of its Subsidiaries, or their officers or directors in their capacity as such, that could have a Material Adverse Effect. The SEC Documents contain a complete list and summary description of any material pending or, to the knowledge of the Company, threatened proceeding against or affecting the Company or any of its Subsidiaries. The Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing. Notwithstanding the foregoing, the Buyer acknowledges the existence of all litigations disclosed and outstanding the SEC Documents.

k. Intellectual Property. The Company and each of its Subsidiaries owns or possesses the requisite licenses or rights to use all patents, patent applications, patent rights, inventions, know-how, trade secrets, trademarks, trademark applications, service marks, service names, trade names and copyrights (“Intellectual Property”) necessary to enable it to conduct its business as now operated (and, as presently contemplated to be operated in the future); there is no claim or action by any person pertaining to, or proceeding pending, or to the Company’s knowledge threatened, which challenges the right of the Company or of a Subsidiary with respect to any Intellectual Property necessary to enable it to conduct its business as now operated (and, as presently contemplated to be operated in the future); to the best of the Company’s knowledge, the Company’s or its Subsidiaries’ current and intended products, services and processes do not infringe on any Intellectual Property or other rights held by any person; and the Company is unaware of any facts or circumstances which might give rise to any of the foregoing. The Company and each of its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of their Intellectual Property.

l. No Materially Adverse Contracts, Etc. Neither the Company nor any of its Subsidiaries is subject to any charter, corporate or other legal restriction, or any judgment, decree, order, rule or regulation which in the judgment of the Company’s officers has or is expected in the future to have a Material Adverse Effect. Neither the Company nor any of its Subsidiaries is a party to any contract or agreement which in the judgment of the Company’s officers has or is expected to have a Material Adverse Effect.

m. Tax Status. The Company and each of its Subsidiaries has made or filed all federal, state and foreign income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Subsidiaries has set aside on its books provisions reasonably adequate for the payment of all unpaid and unreported taxes) and has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and has set aside on its books provisions reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim. The Company has not executed a waiver with respect to the statute of limitations relating to the assessment or collection of any foreign, federal, state or local tax. None of the Company’s tax returns is presently being audited by any taxing authority.

n. Transactions with Affiliates. Except as disclosed in SEC filings and except for arm's length transactions pursuant to which the Company or any of its Subsidiaries makes payments in the ordinary course of business upon terms no less favorable than the Company or any of its Subsidiaries could obtain from third parties and other than the grant of stock options described in the SEC Documents, none of the officers, directors, or employees of the Company is presently a party to any transaction with the Company or any of its Subsidiaries (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any corporation, partnership, trust or other entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner.

o. Disclosure. All information relating to or concerning the Company or any of its Subsidiaries set forth in this Agreement and provided to the Buyer pursuant to Section 2(d) hereof and otherwise in connection with the transactions contemplated hereby is true and correct in all material respects and the Company has not omitted to state any material fact necessary in order to make the statements made herein or therein, in light of the circumstances under which they were made, not misleading. No event or circumstance has occurred or exists with respect to the Company or any of its Subsidiaries or its or their business, properties, prospects, operations or financial conditions, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed (assuming for this purpose that the Company's reports filed under the 1934 Act are being included in, or to the extent appropriate and permitted, incorporated into an effective registration statement filed by the Company under the 1933 Act).

p. Acknowledgment Regarding Buyer's Purchase of Securities. The Company acknowledges and agrees that the Buyer is acting solely in the capacity of arm's length purchaser with respect to this Agreement and the transactions contemplated hereby. The Company further acknowledges that the Buyer is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to this Agreement and the transactions contemplated hereby and any statement made by the Buyer or any of its respective representatives or agents in connection with this Agreement and the transactions contemplated hereby is not advice or a recommendation and is merely incidental to the Buyer's purchase of the Securities. The Company further represents to the Buyer that the Company's decision to enter into this Agreement has been based solely on the independent evaluation of the Company and its representatives.

q. [RESERVED]

r. No Brokers. The Company has taken no action which would give rise to any claim by any person for brokerage commissions, transaction fees or similar payments relating to this Agreement or the transactions contemplated hereby.

s. Permits; Compliance. The Company and each of its Subsidiaries is in possession of all franchises, grants, authorizations, licenses, permits, easements, variances, exemptions, consents, certificates, approvals and orders necessary to own, lease and operate its properties and to carry on its business as it is now being conducted (collectively, the "Company Permits"), and there is no action pending or, to the knowledge of the Company, threatened regarding suspension or cancellation of any of the Company Permits. Neither the Company nor any of its Subsidiaries is in conflict with, or in default or violation of, any of the Company Permits, except for any such conflicts, defaults or violations which, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. Since September 30, 2020, neither the Company nor any of its Subsidiaries has received any notification with respect to possible conflicts, defaults or violations of applicable laws, except for notices relating to possible conflicts, defaults or violations, which conflicts, defaults or violations would not have a Material Adverse Effect.

t. Environmental Matters.

(i) There are, to the Company's knowledge, with respect to the Company or any of its Subsidiaries or any predecessor of the Company, no past or present violations of Environmental Laws (as defined below), releases of any material into the environment, actions, activities, circumstances, conditions, events, incidents, or contractual obligations which may give rise to any common law environmental liability or any liability under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or similar federal, state, local or foreign laws and neither the Company nor any of its Subsidiaries has received any notice with respect to any of the foregoing, nor is any action pending or, to the Company's knowledge, threatened in connection with any of the foregoing. The term "Environmental Laws" means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

(ii) Other than those that are or were stored, used or disposed of in compliance with applicable law, no Hazardous Materials are contained on or about any real property currently owned, leased or used by the Company or any of its Subsidiaries, and no Hazardous Materials were released on or about any real property previously owned, leased or used by the Company or any of its Subsidiaries during the period the property was owned, leased or used by the Company or any of its Subsidiaries, except in the normal course of the Company's or any of its Subsidiaries' business.

(iii) There are no underground storage tanks on or under any real property owned, leased or used by the Company or any of its Subsidiaries that are not in compliance with applicable law.

u. Title to Property. The Company and its Subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances and defects except such as are described in Schedule 3(u), if attached hereto, or such as would not have a Material Adverse Effect. Any real property and facilities held under lease by the Company and its Subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as would not have a Material Adverse Effect.

v. Insurance. The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any such Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect. Upon written request the Company will provide to the Buyer true and correct copies of all policies relating to directors' and officers' liability coverage, errors and omissions coverage, and commercial general liability coverage.

w. Internal Accounting Controls. The Company and each of its Subsidiaries maintain a system of internal accounting controls sufficient, in the judgment of the Company's board of directors, to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

x. Foreign Corrupt Practices. Neither the Company, nor any of its Subsidiaries, nor any director, officer, agent, employee or other person acting on behalf of the Company or any Subsidiary has, in the course of his actions for, or on behalf of, the Company, used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, or made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

y. [RESERVED]

z. No Investment Company. The Company is not, and upon the issuance and sale of the Securities as contemplated by this Agreement will not be an “investment company” required to be registered under the Investment Company Act of 1940 (an “Investment Company”). The Company is not controlled by an Investment Company.

aa. No Off-Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company or any of its Subsidiaries and an unconsolidated or other off-balance sheet entity that is required to be disclosed by the Company in its 1934 Act filings and is not so disclosed or that otherwise could be reasonably likely to have a Material Adverse Effect.

bb. No Disqualification Events. None of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, any beneficial owner of twenty percent (20%) or more of the Company’s outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the 1933 Act) connected with the Company in any capacity at the time of sale (each, an “Issuer Covered Person”) is subject to any of the “Bad Actor” disqualifications described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a “Disqualification Event”), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event.

cc. Manipulation of Price. The Company has not, and to its knowledge no one acting on its behalf has: (i) taken, directly or indirectly, any action designed to cause or to result, or that could 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 any of the Securities, (ii) bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company. Notwithstanding the foregoing, the Company has engaged, in ordinary course of business, in investor relations activities and has engaged one or more companies to assist in such activities.

dd. Bank Holding Company Act. Neither the Company nor any of its Subsidiaries is subject to the Bank Holding Company Act of 1956, as amended (the “BHCA”) and to regulation by the Board of Governors of the Federal Reserve System (the “Federal Reserve”). Neither the Company nor any of its Subsidiaries or affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.



ee. Illegal or Unauthorized Payments; Political Contributions. Neither the Company nor any of its Subsidiaries nor, to the Company's knowledge, any of the officers, directors, employees, agents or other representatives of the Company or any of its Subsidiaries or any other business entity or enterprise with which the Company or any Subsidiary is or has been affiliated or associated, has, directly or indirectly, made or authorized any payment, contribution or gift of money, property, or services, whether or not in contravention of applicable law, (i) as a kickback or bribe to any person; or (ii) to any political organization, or the holder of or any aspirant to any elective or appointive public office except for personal political contributions not involving the direct or indirect use of funds of the Company or any of its Subsidiaries.

ff. Breach of Representations by the Company. The Company agrees that if the Company breaches any of the representations set forth in this Section 3 or the Note, that would have a Material Adverse Effect, in addition to any other remedies available to the Buyer pursuant to this Agreement, it will be considered an Event of Default under Section 3 of the Note.

#### 4. ADDITIONAL COVENANTS, AGREEMENTS AND ACKNOWLEDGEMENTS.

a. Best Efforts. The parties shall use their reasonable best efforts to satisfy timely each of the conditions described in Section 6 and 7 of this Agreement.

b. Use of Proceeds. The Company shall use the proceeds as working capital of the Company and not for the repayment of any indebtedness, including any indebtedness owed to officers, directors or employees of the Company or their affiliates or in violation or contravention of any applicable law, rule or regulation.

c. Usury. To the extent it may lawfully do so, the Company hereby agrees not to insist upon or plead or in any manner whatsoever claim, and will resist any and all efforts to be compelled to take the benefit or advantage of, usury laws wherever enacted, now or at any time hereafter in force, in connection with any action or proceeding that may be brought by the Buyer in order to enforce any right or remedy under this Agreement, the Note and any document, agreement or instrument contemplated thereby. Notwithstanding any provision to the contrary contained in this Agreement, the Note and any document, agreement or instrument contemplated thereby, it is expressly agreed and provided that the total liability of the Company under this Agreement, the Note or any document, agreement or instrument contemplated thereby for payments which under applicable law are in the nature of interest shall not exceed the maximum lawful rate authorized under applicable law (the "Maximum Rate"), and, without limiting the foregoing, in no event shall any rate of interest or default interest, or both of them, when aggregated with any other sums which under applicable law in the nature of interest that the Company may be obligated to pay under this Agreement, the Note and any document, agreement or instrument contemplated thereby exceed such Maximum Rate. It is agreed that if the maximum contract rate of interest allowed by law applicable to this Agreement, the Note and any document, agreement or instrument contemplated thereby is increased or decreased by statute or any official governmental action subsequent to the date hereof, the new maximum contract rate of interest allowed by law will be the Maximum Rate applicable to this Agreement, the Note and any document, agreement or instrument contemplated thereby from the effective date thereof forward, unless such application is precluded by applicable law. If under any circumstances whatsoever, interest in excess of the Maximum Rate is paid by the Company to the Buyer with respect to indebtedness evidenced by this Agreement, the Note and any document, agreement or instrument contemplated thereby, such excess shall be applied by the Buyer to the unpaid principal balance of any such indebtedness or be refunded to the Company, the manner of handling such excess to be at the Buyer's election.

d. Restriction on Activities. Commencing as of the date first above written, and until the earlier of payment of the Note in full or full conversion of the Note, the Company shall not, directly or indirectly, without the Buyer's prior written consent, which consent shall not be unreasonably withheld: (a) change the nature of its business in any material respect; or (b) sell, divest, acquire, change the structure of any material assets other than in the ordinary course of business. Notwithstanding the foregoing, any prior public disclosure of the Company's intent or contemplation to sell, divest, acquire, or change the structure of any material assets shall not require Buyer's prior written consent.

e. Listing. The Company, for so long as the Buyer owns any of the Securities, will maintain the listing and trading of its Common Stock on the Principal Market or any replacement exchange or electronic quotation system (including but not limited to the Pink Sheets electronic quotation system) and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of the Financial Industry Regulatory Authority ("FINRA") and such exchanges, as applicable. The Company shall promptly provide to the Buyer copies of any notices it receives from the Principal Market and any other exchanges or electronic quotation systems on which the Common Stock is then traded regarding the continued eligibility of the Common Stock for listing on such exchanges and quotation systems.

f. Corporate Existence. The Company will, so long as there is any remaining principal amount or accrued interest outstanding with respect to the Note, maintain its corporate existence and shall not sell all or substantially all of the Company's assets, except in the event of a merger or consolidation or sale of all or substantially all of the Company's assets, where the surviving or successor entity in such transaction (i) assumes the Company's obligations hereunder and under the agreements and instruments entered into in connection herewith and (ii) is a publicly traded corporation whose Common Stock is listed for trading or quotation on the Principal Market, any tier of the NASDAQ Stock Market, the New York Stock Exchange or the NYSE MKT.

g. No Integration. The Company shall not make any offers or sales of any security (other than the Securities) under circumstances that would require registration of the Securities being offered or sold hereunder under the 1933 Act or cause the offering of the Securities to be integrated with any other offering of securities by the Company for the purpose of any stockholder approval provision applicable to the Company or its securities.

h. Breach of Covenants. The Company acknowledges and agrees that if the Company breaches any of the covenants set forth in this Section 4 that would have a Material Adverse Effect, in addition to any other remedies available to the Buyer pursuant to this Agreement, it will be considered an Event of Default under Section 3.2 of the Note.

i. Compliance with 1934 Act; Public Information Failures. For so long as any portion of the principal amount or any accrued interest remains outstanding, the Company shall comply in all material respects with the reporting requirements of the 1934 Act; and the Company shall continue to be subject to the reporting requirements of the 1934 Act. During the period that the Buyer beneficially owns the Note, if the Company shall (i) fail for any reason to satisfy the requirements of Rule 144(c)(1), including, without limitation, the failure to satisfy the current public information requirements under Rule 144(c) or (ii) if the Company has ever been an issuer described in Rule 144(i)(1)(i) or becomes such an issuer in the future, and the Company shall fail to satisfy any condition set forth in Rule 144(i)(2) (each, a "Public Information Failure") then, as partial relief for the damages to the Buyer by reason of any such delay in or reduction of its ability to sell the Securities (which remedy shall not be exclusive of any other remedies available pursuant to this Agreement, the Note, or at law or in equity), the Company shall pay to the Buyer on every thirtieth day (prorated for periods totaling less than thirty days), an amount in cash equal to three percent (3%) of the Purchase Price for each day of a Public Information Failure until the date such Public Information Failure is cured. The payments to which a holder shall be entitled pursuant to this Section 4(i) are referred to herein as "Public Information Failure Payments." Public Information Failure Payments shall be paid on the earlier of (i) the last day of the calendar month during which such Public Information Failure Payments are incurred and (iii) the third business day after the event or failure giving rise to the Public Information Failure Payments is cured. In the event the Company fails to make Public Information Failure Payments in a timely manner, such Public Information Failure Payments shall bear interest at the rate of 2% per month (prorated for partial months) until paid in full. As used in this Agreement, the term "business day" shall mean any day other than a Saturday, Sunday or a day on which commercial banks in the city of New York, New York are authorized or required by law or executive order to remain closed.

j. Disclosure of Transactions and Other Material Information. By 9:00 a.m., New York time, four (4) Business Days following the date this Agreement has been fully executed and funded, the Company shall file a Current Report on Form 8-K describing the terms of the transactions contemplated by this Agreement in the form required by the 1934 Act and attaching this Agreement, the form of Note and any other related documents that are required to be filed (the “8-K Filing”). From and after the filing of the 8-K Filing with the SEC, the Buyer shall not be in possession of any material, non-public information received from the Company, any of its Subsidiaries or any of their respective officers, directors, employees or agents that is not disclosed in the 8-K Filing. In addition, effective upon the filing of the 8-K Filing, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Buyer or any of its affiliates, on the other hand, shall terminate.

k. Legal Counsel Opinions. Upon the request of the Buyer from time to time, the Company shall be responsible, at its cost, for promptly supplying to the Company’s transfer agent and the Buyer, at the Company’s discretion, either a customary legal opinion letter or reliance letter (which reliance letter shall indicate that the transfer agent may rely on the opinion of Buyer’s counsel) of its counsel (the “Legal Counsel Opinion or Reliance Letter”) to the effect that the resale of the Conversion Shares by the Buyer or its affiliates, successors and assigns is exempt from the registration requirements of the 1933 Act pursuant to Rule 144, provided the requirements of Rule 144 are satisfied and provided the Conversion Shares are not then registered under the 1933 Act for resale pursuant to an effective registration statement, or other applicable exemption, provided the requirements of such other applicable exemption are satisfied. Buyer will take no action or inaction that would invalidate the proposed opinion. Buyer will provide the customary representations to counsel in order to provide such an opinion. Should the Company’s legal counsel fail for any reason other than that the requirements of said exemption are unavailable in the reasonable opinion of counsel to issue the Legal Counsel Opinion or Reliance Letter, the Buyer may, at the Company’s cost, secure another legal counsel, acceptable to the Company, to issue the Legal Counsel Opinion or Reliance Letter, and the Company will instruct its transfer agent to accept such opinion. The Company represents that it is not now, nor ever has been, a “shell company.”

l. Most-Favored Nation. While the Note or any principal amount, interest or fees or expenses due thereunder remain outstanding and unpaid, the Company shall not enter into any subsequent public or private offering of its securities (including securities convertible into shares of Common Stock), or issue any securities from existing convertible or exercisable securities, with any individual or entity (an “Other Investor”) that has the effect of establishing rights or otherwise benefiting such Other Investor in a manner more favorable in any material respect to such Other Investor than the rights and benefits established in favor of the Buyer by this Agreement. In the event the Company enters into such an agreement with said more favorable terms, this Agreement shall automatically, without further action of the parties, be amended to include those more favorable terms into this Agreement.

m. Non-Public Information. The Company covenants and agrees that, following the 8-K Filing, neither it, nor any other person acting on its behalf will provide the Buyer or its agents or counsel with any information that constitutes, or the Company reasonably believes constitutes, material non-public information, unless prior thereto the Buyer shall have consented to the receipt of such information and agreed with the Company to keep such information confidential. The Company understands and confirms that the Buyer shall be relying on the foregoing covenant in effecting transactions in securities of the Company. To the extent that the Company delivers any material, non-public information to the Buyer without such Buyer's consent, the Company hereby covenants and agrees that such Buyer shall not have any duty of confidentiality to the Company, any of its Subsidiaries, or any of their respective officers, directors, agents, employees or affiliates, not to trade on the basis of, such material, non-public information, provided that the Buyer shall remain subject to applicable law. To the extent that any notice provided, information provided, or any other communications made by the Company, to the Buyer, constitutes or contains material non-public information regarding the Company or any Subsidiaries, the Company shall, as promptly as reasonably possible, file such notice or other material information with the SEC pursuant to a Current Report on Form 8-K or other means of public release. In addition to any other remedies provided by this Agreement or the related transaction documents, if the Company provides any material non-public information to the Buyer without their prior written consent, and it fails to disclose this material non-public information in accordance with this provision, it shall pay the Buyer as partial liquidated damages and not as a penalty a sum equal to \$3,000 per day beginning with the day the information is disclosed to the Buyer and ending and including the day the Form 8-K disclosing this information is filed.

n. Regulation A and Registration Rights. Within sixty (60) days of the Closing Date, the Company shall file a Form 1-A under Regulation A listing the Buyer as a selling stockholder with respect to the Shares underlying any of the outstanding notes and securities (including the Note) between Buyer and the Company and the Commitment Shares issued hereunder. The Company shall use its commercially reasonable efforts to have the Regulation A offering qualified within ninety (90) days of the filing date of the Form 1-A. In the event the Company is not able to include the Buyer's securities in the Regulation A offering, for any reason, or if the Buyer requests that Buyer not be listed as a selling stockholder in the Form 1-A, the Company shall be subject to the terms contained in the Piggy-Back Registration Rights Agreement attached hereto as Exhibit B. Failure to comply the terms of this Section, including, if required hereby, the Piggy-Back Registration Rights Agreement, shall constitute an Event of Default under the Note.

o. Right of Participation and First Refusal.

i. Other than arrangements that are in place or disclosed in SEC filings prior to the date of this Agreement, or issuance of securities from the Company's or any of its Subsidiaries formed or to be formed stock, stock option, equity-linked or similar plans approved by the Company's or the relevant subsidiary's Board of Directors or shareholders, or securities issued by the Company or any of its Subsidiaries formed or to be formed in settlement of debt, accounts payable or accrued expenses, from the date first written above until there is no longer any amount of principal or accrued interest payable on the Note, the Company will not, (i) directly or indirectly, offer, sell, grant any option to purchase, or otherwise dispose of (or announce any offer, sale, grant or any option to purchase or other disposition of) any of its or its Subsidiaries' debt, equity or equity equivalent securities, including without limitation any debt, preferred shares or other instrument or security that is, at any time during its life and under any circumstances, convertible into or exchangeable or exercisable for Common Stock (any such offer, sale, grant, disposition or announcement being referred to as a "Subsequent Placement") or (ii) enter into any definitive agreement with regard to the foregoing, in each case unless the Company shall have first complied with this Section 4(o).

ii. The Company shall deliver to the Buyer an irrevocable written notice (the "Offer Notice") of any proposed or intended issuance or sale or exchange (the "Offer") of the securities being offered (the "Offered Securities") in a Subsequent Placement, which Offer Notice shall (w) identify and describe the Offered Securities, (x) describe the price and other terms upon which they are to be issued, sold or exchanged, and the number or amount of the Offered Securities to be issued, sold or exchanged and (y) offer to issue and sell to or exchange with the Buyer the lesser of (i) at least one hundred percent (100%) of the Offered Securities (the "Subscription Amount"); or (ii) the principal amount of the Note issued hereunder.

iii. To accept an Offer, in whole or in part, the Buyer must deliver a written notice to the Company prior to the end of the second (2<sup>nd</sup>) business day after the Buyer's receipt of the Offer Notice (the "Offer Period"), setting forth the portion of the Subscription Amount that the Buyer elects to purchase (the "Notice of Acceptance"). The Company shall complete the Subsequent Placement and issue and sell the Subscription Amount to the Buyer but only upon terms and conditions (including, without limitation, unit prices and interest rates) that are not more favorable to the Buyer or less favorable to the Company than those set forth in the Offer Notice. Upon completion of the first closing or upon the termination of the Subsequent Placement, whichever comes first, the Company shall publicly announce either (A) the consummation of the Subsequent Placement or (B) the termination of the Subsequent Placement.

iv. Notwithstanding anything to the contrary contained herein, if the Company desires to modify or amend the terms and conditions of the Offer prior to the expiration of the Offer Period, the Company shall deliver to the Buyer a new Offer Notice and the Offer Period shall expire on the second (2<sup>nd</sup>) business day after the Buyer's receipt of such new Offer Notice.

As used in this Agreement, the term "business day" shall mean any day other than a Saturday, Sunday or a day on which commercial banks in the city of New York, New York are authorized or required by law or executive order to remain closed.

5. Transfer Agent Instructions. The Company shall issue irrevocable instructions to the Company's transfer agent to issue certificates or other evidence of ownership of such equity instruments in book-entry, registered in the name of the Buyer or its nominee or in street name, upon conversion of the Note, the Conversion Shares, in such amounts as specified from time to time by the Buyer to the Company in accordance with the terms thereof (the "Irrevocable Transfer Agent Instructions"). In the event that the Company proposes to replace its transfer agent, the Company shall provide, prior to the effective date of such replacement, a fully executed Irrevocable Transfer Agent Instructions in a form as initially delivered pursuant to this Agreement (including but not limited to the provision to irrevocably reserve shares of Common Stock in the Reserved Amount (as defined in the Note)) signed by the successor transfer agent to the Company and the Company. Prior to registration of the Conversion Shares under the 1933 Act or the date on which the Conversion Shares may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of Securities as of a particular date that can then be immediately sold, all such certificates shall bear the restrictive legend specified in Section 2(g) of this Agreement. The Company warrants that: (i) no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5 will be given by the Company to its transfer agent; (ii) it will not direct its transfer agent not to transfer or delay, impair, and/or hinder its transfer agent in transferring (or issuing electronically or in certificated form) any certificate for Securities to be issued to the Buyer upon conversion of or otherwise pursuant to the Note as and when required by the Note and this Agreement; (iii) it will not fail to remove (or directs its transfer agent not to remove or impairs, delays, and/or hinders its transfer agent from removing) any restrictive legend (or to withdraw any stop transfer instructions in respect thereof) on any certificate for any Securities issued to the Buyer upon conversion of or otherwise pursuant to the Note as and when required by the Note and this Agreement; and (iv) it will provide any required issuance approvals to its transfer agent within six (6) hours of each conversion of the Note. Nothing in this Section shall affect in any way the Buyer's obligations and agreement set forth in Section 2(g) hereof to comply with all applicable prospectus delivery requirements, if any, upon re-sale of the Securities. If the Buyer provides the Company, at the cost of the Company, with (i) an opinion of counsel in form, substance and scope customary for opinions in comparable transactions, to the effect that a public sale or transfer of such Securities may be made without registration under the 1933 Act and such sale or transfer is effected or (ii) the Buyer provides reasonable assurances that the Securities can be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption, the Company shall permit the transfer, and, in the case of the Securities, promptly instruct its transfer agent to issue one or more certificates, free from restrictive legend, in such name and in such denominations as specified by the Buyer. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Buyer, by vitiating the intent and purpose of the transactions contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 5 may be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section, that the Buyer shall be entitled, in addition to all other available remedies, to an injunction restraining any breach and requiring immediate transfer, without the necessity of showing economic loss and without any bond or other security being required.

6. Conditions to the Company's Obligation to Sell. The obligation of the Company hereunder to issue and sell the Note and the Commitment Shares to the Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions thereto, provided that these conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion:

a. The Buyer shall have executed this Agreement and delivered the same to the Company.

b. The Buyer shall have delivered the Purchase Price in accordance with Section 1(b) above.

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

d. No litigation, statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by or in any court or governmental authority of competent jurisdiction or any self-regulatory organization having authority over the matters contemplated hereby which prohibits the consummation of any of the transactions contemplated by this Agreement.

7. Conditions to The Buyer's Obligation to Purchase. The obligation of the Buyer hereunder to purchase the Note, on the Closing Date, is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for the Buyer's sole benefit and may be waived by the Buyer at any time in its sole discretion:

a. The Company shall have executed this Agreement and delivered the same to the Buyer.

b. The Company shall have delivered to the Buyer the duly executed Note in such denominations as the Buyer shall request and in accordance with Section 1(b) above.

c. The Irrevocable Transfer Agent Instructions, in form and substance satisfactory to the Buyer, shall have been delivered to and acknowledged in writing by the Company's Transfer Agent.

d. The representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of Closing Date, as though made at such time (except for representations and warranties that speak as of a specific date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

e. No litigation, statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by or in any court or governmental authority of competent jurisdiction or any self-regulatory organization having authority over the matters contemplated hereby which prohibits the consummation of any of the transactions contemplated by this Agreement.

f. No event shall have occurred which could reasonably be expected to have a Material Adverse Effect on the Company including but not limited to a change in the 1934 Act reporting status of the Company or the failure of the Company to be timely in its 1934 Act reporting obligations.

g. The Company shall have delivered to the Buyer (i) a certificate evidencing the formation and good standing of the Company and each of its Subsidiaries in such entity's jurisdiction of formation issued by the Secretary of State (or comparable office) of such jurisdiction, as of a date within ten (10) days of the Closing Date, and (ii) resolutions adopted by the Company's Board of Directors at a duly called meeting or by unanimous written consent authorizing this Agreement and all other documents, instruments and transactions contemplated hereby.

#### 8. Governing Law; Miscellaneous.

a. Governing Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of New York without regard to principles of conflicts of laws. Any action brought by either party against the other concerning the transactions contemplated by this Agreement, the Note, or any other agreement, certificate, instrument or document contemplated hereby shall be brought only in the state courts of New York or in the federal courts located in the state of New York. The parties to this Agreement hereby irrevocably waive any objection to jurisdiction and venue of any action instituted hereunder and shall not assert any defense based on lack of jurisdiction or venue or based upon *forum non conveniens*. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTIONS CONTEMPLATED HEREBY.** The prevailing party shall be entitled to recover from the other party its reasonable attorney's fees and costs. Each party hereby irrevocably waives personal service of process and consents to process being served in any suit, action or proceeding in connection with this Agreement, the Note, the Commitment Shares, or any other agreement, certificate, instrument or document contemplated hereby or thereby by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) 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 other manner permitted by law.

b. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party. A facsimile or .pdf signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or .pdf signature. Delivery of a counterpart signature hereto by facsimile or email/.pdf transmission shall be deemed validly delivery thereof.

c. Construction; Headings. This Agreement shall be deemed to be jointly drafted by the Company and the Buyer and shall not be construed against any person as the drafter hereof. The headings of this Agreement are for convenience of reference only and shall not form part of, or affect the interpretation of, this Agreement.

d. Severability. In the event that any provision of this Agreement, the Note, or any other agreement or instrument delivered in connection herewith is invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any such provision which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision of this Agreement, the Note, the Commitment Shares, or any other agreement, certificate, instrument or document contemplated hereby or thereby.

e. Entire Agreement; Amendments. This Agreement, the Note, the Commitment Shares, and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement or any agreement or instrument contemplated hereby may be waived or amended other than by an instrument in writing signed by the Buyer.

f. Notices. All notices, demands, requests, consents, approvals, and other communications required or permitted hereunder shall be in writing and, unless otherwise specified herein, shall be (i) personally served; (ii) deposited in the mail, registered or certified, return receipt requested, postage prepaid; (iii) delivered by reputable air courier service with charges prepaid, or (iv) transmitted by hand delivery, telegram, e-mail or facsimile, addressed as set forth below or to such other address as such party shall have specified most recently by written notice. Any notice or other communication required or permitted to be given hereunder shall be deemed effective (a) upon hand delivery or delivery by e-mail or facsimile, with accurate confirmation generated by the transmitting facsimile machine, at the address or number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

If to the Company, to:

RESPIRERX PHARMACEUTICALS INC.  
126 Valley Road, Suite C  
Glen Rock, New Jersey 07452  
Attention: Jeff Margolis  
e-mail: [jmargolis@respirerx.com](mailto:jmargolis@respirerx.com)

If to the Buyer:

FIRSTFIRE GLOBAL OPPORTUNITIES FUND LLC  
1040 First Avenue, Suite 190  
New York, NY 10022  
Attention: Eli Fireman  
e-mail: [eli@firstfirecapital.com](mailto:eli@firstfirecapital.com)

With a copy by e-mail only to (which copy shall not constitute notice):

FABIAN VANCOTT  
215 South State Street, Suite 1200  
Salt Lake City, Utah 84111  
Attn: Anthony Michael Panek  
e-mail: [apanek@fabianvancott.com](mailto:apanek@fabianvancott.com)

g. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns. Neither the Company nor the Buyer shall assign this Agreement or any rights or obligations hereunder without the prior written consent of the other. Notwithstanding the foregoing, subject to Section 2(f), the Buyer may assign its rights hereunder to any person that purchases Securities in a private transaction from the Buyer or to any of its “affiliates,” as that term is defined under the 1934 Act, without the consent of the Company.



h. Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

i. Survival. The representations and warranties of the Company and the Buyer and the agreements and covenants set forth in this Agreement shall survive the closing hereunder notwithstanding any due diligence investigation conducted by or on behalf of the Buyer or by or on behalf of the Company. The Company agrees to indemnify and hold harmless the Buyer and all their officers, directors, employees and agents for loss or damage arising as a result of or related to any breach or alleged breach by the Company of any of its representations, warranties and covenants set forth in this Agreement or any of its covenants and obligations under this Agreement, including advancement of expenses as they are incurred. The Buyer agrees to indemnify and hold harmless the Company and all its officers, directors, employees and agents for loss or damage arising as a result of or related to any breach or alleged breach by the Buyer of any of its representations, warranties and covenants set forth in this Agreement or any of its covenants and obligations under this Agreement, including advancement of expenses as they are incurred.

j. Publicity. The Company shall be entitled, without the prior approval of the Buyer, to make any press release or SEC, Principal Market (or other applicable trading market) or FINRA filings with respect to such transactions as is required by applicable law and regulations (although the Buyer shall be consulted by the Company in connection with any such press release prior to its release and shall be provided with a copy thereof and be given an opportunity to comment thereon).

k. Expense Reimbursement; Further Assurances. At the Closing to occur as of the Closing Date, the Company shall pay on behalf of the Buyer or reimburse the Buyer for its legal fees and expenses incurred in connection with this Agreement, pursuant to the disbursement authorization signed by the Company of even date. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

l. [RESERVED]

m. Indemnification. In consideration of the Buyer's execution and delivery of this Agreement and acquiring the Securities hereunder, and in addition to all of the Company's other obligations under this Agreement or the Note, the Company shall defend, protect, indemnify and hold harmless the Buyer and its stockholders, partners, members, officers, directors, employees and direct or indirect investors and any of the foregoing persons' agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "Indemnitees") from and against any and all third party actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby or (c) any cause of action, suit or claim brought or made against such Indemnitee by a third party (including for these purposes a derivative action brought on behalf of the Company) and arising out of or resulting from (i) the execution, delivery, performance or enforcement of this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, or (iii) the status of the Buyer or holder of the Securities as an investor in the Company pursuant to the transactions contemplated by this Agreement. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities that is permissible under applicable law.

n. Remedies. The Company and the Buyer each acknowledge that a breach by one, of its obligations hereunder will cause irreparable harm to the other by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Company and the Buyer each acknowledge that the remedy at law for a breach of its obligations under this Agreement or the Note will be inadequate and agrees, in the event of a breach or threatened breach by the Company or the Buyer of the provisions of this Agreement, the Note, or the Commitment Shares, that the Company or the Buyer, as appropriate, shall be entitled, in addition to all other available remedies at law or in equity, and in addition to the penalties assessable herein, to an injunction or injunctions restraining, preventing or curing any breach of this Agreement or the Note and to enforce specifically the terms and provisions hereof, without the necessity of showing economic loss and without any bond or other security being required.

o. Payment Set Aside. To the extent that the Company makes a payment or payments to the Buyer hereunder or pursuant to the Note, or the Buyer enforces or exercises its rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other person or entity under any law (including, without limitation, any bankruptcy law, foreign, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

p. Failure or Indulgence Not Waiver. No failure or delay on the part of the Buyer on the one hand or the Company on the other hand, in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privileges. All rights and remedies of the Buyer or the Company existing hereunder are cumulative to, and not exclusive of, any rights or remedies otherwise available.

[SIGNATURE PAGE  
FOLLOWS]

IN WITNESS WHEREOF, the undersigned Buyer and the Company have caused this Agreement to be duly executed as of the date first above written.

**RESPIRERX PHARMACEUTICALS INC.**

By: \_\_\_\_\_  
Name: Jeff Margolis  
Title: Senior Vice President, Chief  
Financial Officer, Treasurer, Secretary

**FIRSTFIRE GLOBAL OPPORTUNITIES FUND, LLC**

By: FirstFire Capital Management, LLC

By: \_\_\_\_\_  
ELI FIREMAN, Manager

**SUBSCRIPTION AMOUNT:**

**Principal Amount of Note: \$112,000.00**  
**Actual Amount of Purchase Price of Note: \$100,000.00\***

\*The purchase price of \$100,000.00 shall be paid promptly after the full execution of the Note and related transaction documents.

**EXHIBIT A**  
**FORM OF NOTE**  
**[attached hereto]**

**EXHIBIT B**

**(Piggy-Back Registration Rights Agreement)**

**[attached hereto]**

REGISTRATION RIGHTS AGREEMENT

**THIS PIGGY-BACK REGISTRATION RIGHTS AGREEMENT** (this “Agreement”), dated as of February 17, 2021, is made by and between RespireRx Pharmaceuticals Inc., a Delaware corporation (the “Company”), and FirstFire Global Opportunities Fund, LLC (the “Holder”). The Company and the Holder are hereinafter sometimes collectively referred to as the “Parties” and each a “Party” to this Agreement.

**RECITALS**

**WHEREAS**, the Company’s Board of Directors (the “Board”) has unanimously approved, upon the terms and subject to the conditions of, that certain Securities Purchase Agreement, of even date herewith, by and between the Holder and the Company (the “The Securities Purchase Agreement”), the Company has agreed to issue and sell to Holder a convertible promissory note in the principal amount of \$112,000.00 (the “Note”, together with any other existing security between the parties, the “Securities”), to the Holder; and

**WHEREAS**, to induce the Holder to execute and deliver the Securities Purchase Agreement and this Agreement, the Company has agreed to provide certain piggy-back registration rights under the Securities Act of 1933, as amended (the “Securities Act”) and the rules and regulations promulgated thereunder, and applicable state securities laws, with respect to the shares of Securities issuable pursuant to the Securities Purchase Agreement.

**NOW, THEREFORE**, for and in consideration of the foregoing premises, the agreements and covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Holder, intending to be legally bound, hereby agree as follows:

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

- a. “Closing Date” shall mean the Purchase Date, as such term is defined in the Securities Purchase Agreement.
  - b. “Effective Date” shall mean the date the SEC declares the Registration Statement effective and the Company has filed all necessary amendments, including the letter to request accelerated effectiveness and the Prospectus covering the resale of Shares.
  - c. “Filing Date” shall mean the date the Registration Statement has been filed with the SEC (as determined by EDGAR) and no stop order of acceptance has been issued by the SEC.
  - d. “Person” means a corporation, a limited liability company, an association, a partnership, an organization, a business, an individual, a governmental or political subdivision thereof or a governmental agency.
  - e. “Principal Market” means either the NYSE MKT (formerly the American Stock Exchange), the New York Stock Exchange, Inc., the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Stock Capital Market, OTCQX® Best Market, the OTCQB® Venture Market or the OTC Pink Market, whichever is the principal market on which the Securities is listed.
-

f. “Purchase Amount” means the Purchase Price, as such term is defined in the Securities Purchase Agreement.

g. “Register”, “Registered” and “Registration” refer to a registration effected by preparing and filing with the SEC one or more Registration Statements in compliance with the Securities Act and/or pursuant to Rule 415 under the Securities Act or any successor rule providing for among other securities, the securities issuable upon conversion of the Note or otherwise issued related thereto (“Note Securities”) on a continuous basis (“Rule 415”), and effectiveness of such Registration Statement(s).

h. “Piggy-Back Registrable Securities” means the shares of Note Securities issued or issuable (i) pursuant to the Securities Purchase Agreement and (ii) any shares of capital stock issued or issuable with respect to such Note or Note Securities as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, which have not been (x) included in a Registration Statement that has been declared effective by the SEC, (y) sold under circumstances meeting all of the applicable conditions of Rule 144, promulgated under the Securities Act or (z) saleable without limitation as to time, manner and volume pursuant to Rule 144(k) (or any similar provision then in force) under the Securities Act.

i. “Registration Statement” means a registration statement of the Company filed with the SEC under the Securities Act.

j. “SEC” means the United States Securities and Exchange Commission.

All capitalized terms used but not defined in this Agreement shall have the meaning ascribed to them in the Securities Purchase Agreement; provided however, that any references to Fixed Conversion Price or Default Fixed Conversion Price shall have the meaning ascribed to them in the Note.

For the purposes of determining dates for penalties or filing deadlines, as outlined in this Agreement, both Parties agree that the date given by the SEC shall constitute the official date.

**2. Registration.** This entire Agreement applies only in the event the Company is unable to include the Piggy-Back Registrable Securities of the Buyer in a Form 1-A as set out in Section 4(n) of the Securities Purchase Agreement or the Holder elects not have the Piggy-Back Registrable Securities included in a Form 1-A.

a. Piggy-Back Registration. With respect to only one of the first three times the Company files a Registration Statement under the Securities Act, and at the request of the Holder, the Company shall use its commercially reasonable efforts, to the extent permissible under U.S. securities laws and the rules and regulations thereunder, to include the Piggy-Back Registrable Securities in such Registration Statement with the intention of covering the resale of all of the Piggy-Back Registrable Securities. The Company shall, to the extent permissible by U.S. securities laws and the rules and regulations thereunder initially register for resale all of the Piggy-Back Registrable Securities, but in no case less than eight million six hundred forty-five thousand (8,645,000) shares of Common Stock for issuance pursuant to a conversion of the Note (6,020,000 Conversion Shares inclusive of guaranteed accrued interest and 2,000,000 Commitment Shares and 625,000 shares issuable upon exercise of that certain common stock purchase warrant dated July 2, 2020 (after adjustment for the reverse stock split on January 5, 2021), or an amount equal to the maximum amount allowed under the applicable rule or rules as interpreted by the SEC. In the event the Company cannot register sufficient shares of Securities, due to the remaining number of authorized shares of Securities being insufficient, the Company will use its best efforts to register the maximum number of shares it can, based upon the remaining balance of authorized shares and will use its best efforts to increase the number of its authorized shares as soon as reasonably practicable.

---

b. The Company shall use its commercially reasonable efforts, to the extent permissible under U.S. securities laws, to have the Registration Statement filed with the SEC within forty-five (45) days following any rejection of the inclusion of the Piggy-Back Registrable Securities of the Holder, or the determination that it is not feasible to include the Securities in the Form 1-A offering statement (the “Filing Deadline”) or if, at the time the Company intends to file Form 1-A, the Holder determines that it does not want its Piggy-Back Registrable Securities to be included in the Form 1-A.

Notwithstanding the foregoing, failure to file by the Filing Deadline shall not constitute an Event of Default under the Note to the extent any delay in the filing of the Registration Statement occurs because of an act of, or a failure to act or to act timely by the Holder or is otherwise attributable to the Holder.

The Company acknowledges that its failure to have the Registration Statement filed by the Filing Deadline will cause the Holder to suffer irreparable harm, and, that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate that the failure to file by the Filing Deadline shall constitute an acceleration event with respect to the Maturity Date of the Note. The availability of any remedies hereunder and thereunder shall not relieve the Company from its obligations to register the Piggy-Back Registrable Securities and deliver the Securities pursuant to the terms of this Agreement and the Securities Purchase Agreement.

c. The Company shall use its efforts and take all available steps to have the Registration Statement declared effective by the SEC within ninety (90) calendar days after the Filing Date (the “Effective Deadline”). If the Registration Statement covering the Piggy-Back Registrable Securities to be filed by the Company pursuant to Section 2(a) hereof has not become effective by the Effective Deadline, then it shall constitute a Maturity Date acceleration event under the Note.

If the Registration Statement covering the Piggy-Back Registrable Securities to be filed by the Company pursuant to Section 2(a) hereof has become effective, and, thereafter, the Holder’s right to sell is suspended, for any reason, then the Company shall pay the Holder the sum of one percent (1%) of the Purchase Amount plus interest and penalties due to the Holder for the Piggy-Back Registrable Securities pursuant to the Securities Purchase Agreement for each thirty (30) calendar day period, pro rata, compounded annually, following the suspension, until such suspension ceases (the “Suspension Damages”). The Suspension Damages shall continue until the obligation is fulfilled and shall be paid within five (5) business days after each thirty (30) day period, or portion thereof, until such suspension is released. The Suspension Damages shall be paid, at the Holder’s option, in cash or shares of the Company’s common stock, par value \$0.001, priced at the Fixed Default Conversion Price, or portion thereof. Failure of the Company to make payment within said five (5) business days after each thirty (30) day period shall be considered a breach of this Agreement.

Notwithstanding the foregoing, the amounts payable by the Company pursuant to this Section 2(c) shall not be payable to the extent any delay in the effectiveness of the Registration Statement or any suspension of the effectiveness occurs because of an act of, or a failure to act or to act timely by the Holder or is otherwise attributable to the Holder.

The Company acknowledges that its failure to have the Registration Statement become effective by the Effective Deadline or to permit the suspension of the effectiveness of the Registration Statement, will cause the Holder to suffer irreparable harm and, that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate to include in this Agreement a provision for liquidated damages. The Parties acknowledge and agree that the liquidated damages provision set forth in this Section 2(c) represents the Parties’ good faith effort to quantify such damages and, as such, agree that the form and amount of such liquidated damages are reasonable and will not constitute a penalty. The payment of liquidated damages shall not relieve the Company from its obligations to register the Securities and deliver the Securities pursuant to the terms of this Agreement and the Securities Purchase Agreement.

---



### **3. Related Obligations.**

At such time as the Company is obligated to prepare and file a Registration Statement with the SEC pursuant to Section 2(a) hereof, the Company will use its best efforts to effect the registration of the Piggy-Back Registrable Securities in accordance with the intended method of disposition thereof and, with respect thereto, the Company shall have the following obligations:

a. The Company shall use its best efforts to cause such Registration Statement relating to the Piggy-Back Registrable Securities to become effective within ninety (90) calendar days after the Filing Date and shall keep such Registration Statement effective pursuant to Rule 415 under the Securities Act until the date on which the Holder shall have sold all the Piggy-Back Registrable Securities or the Shares included therein otherwise cease to be Piggy-Back Registrable Securities (the “Registration Period”), which Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall, as of the date thereof, not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

b. The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement and the prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 under the Securities Act, as may be necessary to keep such Registration Statement effective during the Registration Period, and, during such period, comply with the provisions of the Securities Act with respect to the disposition of all Piggy-Back Registrable Securities of the Company covered by such Registration Statement until such time as all of such Piggy-Back Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the Holder as set forth in such Registration Statement. In the event the number of shares of Securities available under a Registration Statement filed pursuant to this Agreement is at any time insufficient to cover all of the Piggy-Back Registrable Securities, the Company shall amend such Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover all of the Piggy-Back Registrable Securities, in each case, as soon as practicable, but in any event within thirty (30) calendar days after the necessity therefor arises (based on the then Purchase Price of the Securities and other relevant factors on which the Company reasonably elects to rely), assuming the Company has sufficient authorized shares at that time, and if it does not, within thirty (30) calendar days after such shares are authorized. The Company shall use its best efforts to cause such amendment and/or new Registration Statement to become effective as soon as practicable following the filing thereof.

c. The Company shall furnish to the Holder whose Piggy-Back Registrable Securities are included in any Registration Statement and its legal counsel without charge and upon request (i) promptly after the same is prepared and filed with the SEC at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits, the prospectus included in such Registration Statement (including each preliminary prospectus) and, with regards to such Registration Statement(s), any correspondence by or on behalf of the Company to the SEC or the staff of the SEC and any correspondence from the SEC or the staff of the SEC to the Company or its representatives, (ii) upon the effectiveness of any Registration Statement, a copy of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Holder may reasonably request) and (iii) such other documents, including copies of any preliminary or final prospectus, as the Holder may reasonably request from time to time in order to facilitate the disposition of the Piggy-Back Registrable Securities. The Company filing the documents described in this paragraph through EDGAR shall constitute delivery.

---

d. The Company shall use reasonable efforts to (i) register and qualify the Piggy-Back Registrable Securities covered by a Registration Statement under the applicable securities or “blue sky” laws of such states of the United States as reasonably specified by the Holder; (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period; (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period; and (iv) take all other actions reasonably necessary or advisable to qualify the Piggy-Back Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify the Holder who holds Piggy-Back Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Piggy-Back Registrable Securities for sale under the securities or “blue sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

e. Upon the happening of any event as a result of which the prospectus included in a Registration Statement, as then in effect, would then contain an untrue statement of a material fact or omission to state a material fact, which would otherwise be required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and, as a result, the prospectus is required to be supplemented or as a result of which the Registration Statement is required to be amended (“Registration Default”), the Company shall use all diligent efforts to promptly prepare any necessary supplement to such prospectus or amendment to such Registration Statement and take any other necessary steps to cure the Registration Default, and deliver one (1) copy of such supplement or amendment to Holder (or such other number of copies as Holder may reasonably request; delivery via EDGAR shall constitute delivery). Failure to cure the Registration Default within five (5) business days shall result in the Company paying liquidated damages of one percent (1%) of the Purchase Amount for each thirty (30) calendar day period or portion thereof, beginning on the date of suspension. The Company shall also promptly notify Holder in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to Holder by facsimile on the same day of such effectiveness and by overnight mail); (ii) in the event the Registration Statement is no longer effective; or (iii) the Registration Statement is stale for a period of more than five (5) trading days as a result of the Company’s failure to timely file its financials with the SEC.

The Company acknowledges that its failure to cure the Registration Default within five (5) business days will cause the Holder irreparable harm, and that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate to include in this Agreement a provision for liquidated damages. The Parties acknowledge and agree that the liquidated damages provision set forth in this Section 3(e) represents the Parties’ good faith effort to quantify such damages and, as such, agree that the form and amount of such liquidated damages are reasonable and will not constitute a penalty.

---

It is the intention of the Parties that interest payable under any of the terms of this Agreement shall not exceed the maximum amount permitted under any applicable law. If a law, which applies to this Agreement which sets the maximum interest amount, is finally interpreted so that the interest in connection with this Agreement exceeds the permitted limits, then: (1) any such interest shall be reduced by the amount necessary to reduce the interest to the permitted limit; and (2) any sums already collected (if any) from the Company which exceed the permitted limits will be refunded to the Company. The Holder may choose to make this refund by reducing the amount that the Company owes under this Agreement or by making a direct payment to the Company. If a refund reduces the amount that the Company owes the Holder, the reduction will be treated as a partial payment. In the event that any provision of this Agreement is held by a court of competent jurisdiction to be excessive in scope or otherwise invalid or unenforceable, such provision shall be adjusted rather than voided, if possible, so that it is enforceable to the maximum extent possible, and the validity and enforceability of the remaining provisions of this Agreement will not in any way be affected or impaired thereby.

f. The Company shall use its best efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Piggy-Back Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify the Holder of the issuance of such order and the resolution thereof. The Company will immediately notify the Holder of a proceeding, or threat of proceeding, the result of which could affect the effectiveness of the registration statement.

g. [RESERVED]

h. [RESERVED]

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

j. The Company shall use its best efforts to secure designation and quotation of all the Piggy-Back Registrable Securities covered by any Registration Statement on the Principal Market, to the extent such is necessary for the Piggy-Back Registrable Securities to trade on such market. If, despite the Company's best efforts, the Company is unsuccessful in satisfying this obligation, it shall use its best efforts to cause all the Piggy-Back Registrable Securities covered by any Registration Statement to be listed on each other national securities exchange and automated quotation system, if any, on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Piggy-Back Registrable Securities is then permitted under the rules of such exchange or system. If, despite the Company's best efforts, the Company is unsuccessful in satisfying its obligation in this Section, it will use its best efforts to secure the inclusion for quotation with the OTC Pink Sheets. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(j).

k. The Company shall cooperate with the Holder to facilitate the timely preparation and delivery of book-entry or street name shares(not bearing any restrictive legend) representing the Piggy-Back Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Holder may reasonably request and registered in such names of the Persons who shall acquire such Piggy-Back Registrable Securities from the Holder, as the Holder may request.

---

l. The Company shall provide a transfer agent for all the Piggy-Back Registrable Securities not later than the Effective Date of the first Registration Statement filed pursuant hereto.

m. If requested by the Holder, the Company shall (i) as soon as reasonably practical, incorporate in a prospectus supplement or post-effective amendment such information as Holder reasonably determines should be included therein relating to the sale and distribution of Piggy-Back Registrable Securities, including, without limitation, information with respect to the Note and the Note Securities; (ii) make all required filings of such prospectus supplement or post-effective amendment as soon as notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement if reasonably requested by Holder.

n. The Company shall use its best efforts to cause the Piggy-Back Registrable Securities covered by the applicable Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Piggy-Back Registrable Securities.

o. [RESERVED]

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

q. Within five (5) business days after the Registration Statement which includes the Piggy-Back Registrable Securities is declared effective by the SEC, the Company shall deliver to the Holder confirmation that such Registration Statement has been declared effective by the SEC.

r. After the SEC declares the Registration Statement cleared of all comments and the Company's acceptance of the effectiveness of the Registration Statement, the Company shall file a prospectus covering the resale of the Shares (the "Prospectus") within five (5) trading days.

s. The Company shall take all other reasonable actions necessary to expedite and facilitate disposition by the Holder of the Piggy-Back Registrable Securities pursuant to a Registration Statement.

#### **4. Obligations Of The Holder.**

a. At least five (5) calendar days prior to the first anticipated filing date of a Registration Statement, the Company shall notify the Holder in writing of the information the Company requires from the Holder. The Holder covenants and agrees that, in connection with any resale of Piggy-Back Registrable Securities by it pursuant to a Registration Statement, it shall comply with the "Plan of Distribution" section of the current prospectus relating to such Registration Statement.

b. The Holder, by the Holder's acceptance of the Piggy-Back Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder and in responding to SEC comments in connection therewith.

---

c. The Holder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(f) hereof or the first sentence of Section 3(e) hereof, the Holder will immediately discontinue disposition of Piggy-Back Registrable Securities pursuant to any Registration Statement(s) covering such Piggy-Back Registrable Securities until Holder's receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(f) hereof or the first sentence of Section 3(e) hereof.

#### **5. Expenses Of Registration.**

All expenses, other than underwriting discounts and commissions, incurred in connection with registrations, filings or qualifications pursuant to Section 2 and Section 3 hereof, including, without limitation, all registration, listing and qualifications fees, printing and accounting fees, and reasonable fees and disbursements of counsel for the Company shall be paid by, and are the sole obligation of, the Company.

#### **6. Indemnification.**

In the event any Piggy-Back Registrable Securities are included in a Registration Statement under this Agreement:

a. To the fullest extent permitted by law, the Company will, and hereby agrees to, indemnify, hold harmless and defend the Holder who holds such Piggy-Back Registrable Securities, the directors, officers, partners, employees, agents, representatives of, and each Person, if any, who controls Holder within the meaning of the Securities Act or the Exchange Act) (each, an "Indemnified Person"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys' fees, amounts paid in settlement or reasonable expenses, joint or several (collectively, "Claims"), incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto (Indemnified Damages"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the Note under the securities or other "blue sky" laws of any jurisdiction in which Piggy-Back Registrable Securities are offered ("Blue Sky Filing"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which the statements therein were made, not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Piggy-Back Registrable Securities pursuant to a Registration Statement (the matters in the foregoing clauses (i) through (iii) being, collectively, "Violations"). Subject to the restrictions set forth in Section 6(c) hereof with respect to the number of legal counsel, the Company shall reimburse the Holder and each such controlling person, promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim arising out of or based upon a Violation committed by any Indemnified Person or which occurs in reliance upon and in conformity with information furnished in writing to the Company by any Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto, if such prospectus were timely made available by the Company pursuant to Section 3(c) hereof; (ii) shall not be available to the extent such Claim is based on (a) a failure of the Holder to deliver or to cause to be delivered the prospectus made available by the Company or (b) the Indemnified Person's use of an incorrect prospectus despite being promptly advised in advance by the Company in writing not to use such incorrect prospectus; and (iii) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the resale of the Piggy-Back Registrable Securities by the Holder pursuant to the Registration Statement.

---

b. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. The indemnifying party shall pay for only one separate legal counsel for the Indemnified Persons or the Indemnified Parties, as applicable. Such counsel shall be selected by the Company if the Company is the indemnifying party. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such Claim. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is actually prejudiced in its ability to defend such action.

c. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

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

---

## **7. Contribution.**

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 hereof to the fullest extent permitted by law; provided, however, that: (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in Section 6 hereof; (ii) no seller of Piggy-Back Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any seller of Piggy-Back Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Piggy-Back Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Piggy-Back Registrable Securities.

## **8. Reports Under The Exchange Act.**

With a view to making available to the Holders the benefits of Rule 144 under the Securities Act or any similar rule or regulation of the SEC that may at any time permit the Investors to sell securities of the Company to the public without registration (“Rule 144”) the Company agrees to take commercially reasonable efforts to:

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

b. file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act so long as the Company remains subject to such requirements and the filing of such reports and other documents as are required by the applicable provisions of Rule 144; and

c. furnish to the Holder so long as the Holder owns Piggy-Back Registrable Securities, promptly upon request, (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

## **9. No Assignment Of Registration Rights.**

The registration rights and obligations under this Agreement shall not be assignable.

## **10. Amendment Of Registration Rights.**

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of both the Company and the Holder of the Piggy-Back Registrable Securities. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon the Holder and the Company. No such amendment shall be effective to the extent that it applies to less than all of the Holders of the Piggy-Back Registrable Securities. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of this Agreement unless the same consideration also is offered to all of the Parties to this Agreement.

---

## **11. Miscellaneous.**

a. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided a confirmation of transmission is mechanically or electronically generated and kept on file by the sending Party); or (iii) one (1) day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the Party to receive the same. The addresses for such communications are as set forth on the signature page to this Agreement. Each Party shall provide five (5) business days prior notice to the other Party of any change in address, phone number or facsimile number.

b. Failure of any Party to exercise any right or remedy under this Agreement or otherwise, or delay by a Party in exercising such right or remedy, shall not operate as a waiver thereof.

c. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the Parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. The Parties submit to the jurisdiction of the state of New York and federal courts in the borough of Manhattan, New York, and agree that any legal action or proceeding relating to this Agreement may be brought in those courts.

d. This Agreement and the Securities Purchase Agreement and the Note and any other documents constitute the entire set of agreements among the Parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, or undertakings, other than those set forth or referred to herein or in the Securities Purchase Agreement.

e. This Agreement and the Securities Purchase Agreement supersede all prior agreements and understandings among the Parties hereto with respect to the subject matter hereof and thereof.

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

g. This Agreement may be executed in two or more counterparts, all of which taken together shall constitute one instrument. Execution and delivery of this Agreement by exchange of facsimile copies bearing the facsimile signature of a Party shall constitute a valid and binding execution and delivery of this Agreement by such Party. Such facsimile copies shall constitute enforceable original documents.

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

i. All consents and other determinations to be made by the Holder pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Holder holding a majority of the Piggy-Back Registrable Securities.

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

---



k. The Company hereby represents to the Holder that: (i) it has voluntarily entered into this Agreement of its own freewill, (ii) it is not entering into this Agreement under economic duress, (iii) the terms of this Agreement are reasonable and fair to the Company, and (iv) the Company has had independent legal counsel of its own choosing review this Agreement, advise the Company with respect to this Agreement, and represent the Company in connection with its entering into this Agreement.

l. Notwithstanding anything in this Agreement to the contrary, the Parties hereto hereby acknowledge and agree to the following: (i) the Holder makes no representations or covenants that it will not engage in trading in the securities of the Company; (ii) the Company has not and shall not provide material non-public information to the Holder unless prior thereto the Holder shall have executed a written agreement regarding the confidentiality and use of such information; and (iii) the Company understands and confirms that the Holder will be relying on the acknowledgements set forth in clauses (i) through (iii) above if the Holder effects any transactions in the securities of the Company.

**12. Waiver.**

The Holder’s delay or failure at any time or times hereafter to require strict performance by Company of any undertakings, agreements or covenants shall not waive, affect, or diminish any right of the Holder under this Agreement to demand strict compliance and performance herewith. Any waiver by the Holder of any breach under this Agreement (an “Event of Default”) shall not waive or affect any other Event of Default, whether such Event of Default is prior or subsequent thereto and whether of the same or a different type. None of the undertakings, agreements and covenants of the Company contained in this Agreement, and no Event of Default, shall be deemed to have been waived by the Holder, nor may this Agreement be amended, changed or modified, unless such waiver, amendment, change or modification is evidenced by an instrument in writing specifying such waiver, amendment, change or modification and signed by the Holder.

**13. Payment Of Liquidated Damages.**

With respect to any liquidated damages or other fees incurred herein by the Company for failure to act in a timely manner, the Holder reserves the rights to take payment of such amounts in cash or in Securities priced at the Fixed Default Conversion Price.

*[Signature Page Follows]*

---

IN WITNESS WHEREOF, the Parties hereto have caused this Registration Rights Agreement to be duly executed on the day and year first above written.

THE COMPANY:

RESPIRERX PHARMACEUTICALS INC.

By: \_\_\_\_\_  
Name: Jeff Margolis  
Title: Senior Vice President, Chief Financial Officer,  
Treasurer and Secretary  
Address: 126 Valley Road, Suite C  
Glen Rock, New Jersey 07452

HOLDER:

FirstFire Global Opportunities Fund, LLC  
*(entity name, if applicable)*

By: \_\_\_\_\_  
Name: Eli Fireman, Manager of FirstFire Capital Management,  
LLC, its Manager  
Address: 1040 1<sup>st</sup> Avenue, Suite 190  
New York, New York 10022

---

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT OR OTHER APPLICABLE EXEMPTION. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

**Principal Amount: \$112,000.00**

**Issue Date: February 17, 2021**

**Actual Amount of Purchase Price: \$100,000.00**

### **CONVERTIBLE PROMISSORY NOTE**

**FOR VALUE RECEIVED, RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (hereinafter called the “Borrower”), hereby promises to pay to the order of **FIRSTFIRE GLOBAL OPPORTUNITIES FUND LLC**, a Delaware limited liability company, or registered assigns (the “Holder”), in the form of lawful money of the United States of America, the principal sum of up to \$112,000.00 (the “Principal Amount”) (subject to adjustment herein), with a purchase price of \$100,000.00 (the “Consideration”) hereof plus an original issue discount in the amount of \$12,000.00 (the “OID”), and to pay interest on the Principal Amount under this Note at the rate of ten percent (10%) (the “Interest Rate”) per annum guaranteed from the date that the amount of Consideration is fully funded in accordance with the terms of this Note until the same becomes due and payable, whether at maturity or upon acceleration or by prepayment or otherwise, as further provided herein. The maturity date for this Note shall be nine (9) months from the issue date (“Maturity Date”), and is the date upon which the principal sum as well as any accrued and unpaid interest and other fees shall be due and payable. Notwithstanding any other provision of this Note or any related transaction documents, Borrower may prepay this Note only pursuant to Section 1.9 hereof.

It is further acknowledged and agreed that the Principal Amount owed by Borrower under this Note shall be increased by the amount of all expenses up to a maximum of \$500 incurred by the Holder relating to any conversion of this Note into shares of Common Stock. All such expenses shall be deemed added to the Principal Amount hereunder to the extent such expenses are paid by the Holder.

Interest shall commence accruing on the date that the Note is issued and shall be computed on the basis of a 365-day year and the actual number of days elapsed. Any Principal Amount or interest on this Note which is not paid when due shall bear interest at the rate the lesser of (a) twenty-four percent (24%) per annum from the due date thereof until the same is paid (“Default Interest”); or (b) the maximum rate allowed by law.

All payments due hereunder (to the extent not converted into shares of common stock of the Borrower (the “Common Stock”) in accordance with the terms hereof) shall be made in lawful money of the United States of America. All payments shall be made at such address as the Holder shall hereafter give to the Borrower by written notice made in accordance with the provisions of this Note. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a business day, the same shall instead be due on the next succeeding day which is a business day and, in the case of any interest payment date which is not the date on which this Note is paid in full, the extension of the due date thereof shall not be taken into account for purposes of determining the amount of interest due on such date.

Each capitalized term used herein, and not otherwise defined, shall have the meaning ascribed thereto in that certain Securities Purchase Agreement, dated as of the Issue Date, pursuant to which this Note was originally issued (the “Purchase Agreement”). As used in this Note, the term “business day” shall mean any day other than a Saturday, Sunday or a day on which commercial banks in the city of New York, New York are authorized or required by law or executive order to remain closed. As used herein, the term “Trading Day” means any day that shares of Common Stock are listed for trading or quotation on the Principal Market (as defined in the Purchase Agreement), any tier of the NASDAQ Stock Market, the New York Stock Exchange or the NYSE MKT or any of the OTCQX® Best Market, OTCQB® Venture Market or the OTC Pink Market.

This Note is free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of shareholders of the Borrower and will not impose personal liability upon the holder thereof.

The following terms shall apply to this Note:

## ARTICLE I. CONVERSION RIGHTS

1.1 Conversion Right. The Holder shall have the right, at any time while there are amounts outstanding under the Note and after 180 days from the issuance hereof, to convert all or any portion of the then outstanding and unpaid Principal Amount and interest (including any Default Interest) into fully paid and non-assessable shares of Common Stock, as such Common Stock exists on the Issue Date, or any shares of capital stock or other securities of the Borrower into which such Common Stock shall hereafter be changed or reclassified, at the Conversion Price (as defined below) determined as provided herein (a “Conversion”); *provided, however*, that in no event shall the Holder be entitled to convert any portion of this Note in excess of that portion of this Note upon conversion of which the sum of (1) the number of shares of Common Stock beneficially owned by the Holder and its affiliates (other than shares of Common Stock which may be deemed beneficially owned through the ownership of the unconverted portion of this Note or the unexercised or unconverted portion of any other security of the Borrower subject to a limitation on conversion or exercise analogous to the limitations contained herein) and (2) the number of Conversion Shares issuable upon the conversion of the portion of this Note with respect to which the determination of this proviso is being made, would result in beneficial ownership by the Holder and its affiliates of more than 4.99% of the then outstanding shares of Common Stock. For purposes of the proviso set forth in the immediately preceding sentence, beneficial ownership shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “1934 Act”), and Regulations 13D-G thereunder, except as otherwise provided in clause (1) of such proviso, *provided, however*, that the limitations on conversion may be waived (up to 9.99%) by the Holder upon, at the election of the Holder, not less than 61 days’ prior notice to the Borrower, and the provisions of the conversion limitation shall continue to apply until such 61st day (or such later date, as determined by the Holder, as may be specified in such notice of waiver). The number of Conversion Shares to be issued upon each conversion of this Note shall be determined by dividing the Conversion Amount (as defined below) by the applicable Conversion Price then in effect on the date specified in the notice of conversion, in the form attached hereto as Exhibit A (the “Notice of Conversion”), delivered to the Borrower or Borrower’s transfer agent by the Holder in accordance with Section 1.4 below; provided that the Notice of Conversion is submitted by facsimile or e-mail (or by other means resulting in, or reasonably expected to result in, notice) to the Borrower or Borrower’s transfer agent before 11:59 p.m., New York, New York time on such conversion date (the “Conversion Date”). The term “Conversion Amount” means, with respect to any conversion of this Note, the sum of (1) the Principal Amount of this Note to be converted in such conversion plus (2) at the Holder’s option, accrued and unpaid interest, if any, on such Principal Amount at the Interest Rate to the Conversion Date, plus (3) at the Holder’s option, Default Interest, if any, on the amounts referred to in the immediately preceding clauses (1) and/or (2), plus (4) up to \$500.00 of expenses incurred by the Holder with respect to a Conversion.

## 1.2 Conversion Price.

(a) Calculation of Conversion Price. The per share conversion price into which Principal Amount and interest (including any Default Interest) under this Note shall be convertible into shares of Common Stock hereunder (the “Conversion Price”) shall be equal to two cents (\$0.02) per share (the “Fixed Conversion Price”) subject to pro rata and other appropriate adjustments in the event of a stock split, reverse-stock split, stock dividend and similar recapitalizations; *provided however*, if an Event of Default has occurred or is existing while any amounts due under this Note are outstanding, the Conversion Price shall be one cent (\$0.01) per share (the “Alternate Conversion Price”), also Alternate Conversion Price shall be subject to pro rata and other appropriate adjustments as would be applicable to the Conversion Price. In the event the Borrower has a DTC “Chill” on its shares, an additional discount of ten percent (10%) shall apply to the Conversion Price while that “Chill” is in effect.

(b) Conversion Price During Major Announcements. Notwithstanding anything contained in Section 1.2(a) to the contrary, in the event the Borrower (i) makes a public announcement that it intends to be acquired by, consolidate or merge with any other corporation or entity (other than a merger in which the Borrower is the surviving or continuing corporation and its capital stock is unchanged) or sell or transfer all or substantially all of the assets of the Borrower or (ii) any person, group or entity (including the Borrower) publicly announces a tender offer to purchase fifty percent (50%) or more of the Common Stock (or any other takeover scheme) (any such transaction referred to in clause (i) or (ii) being referred to herein as a “Change in Control” and the date of the announcement referred to in clause (i) or (ii) is being referred to herein as the “Announcement Date”), then the Conversion Price shall, effective upon the Announcement Date and continuing through the Adjusted Conversion Price Termination Date (as defined below), be equal to the lower of (x) the Conversion Price and (y) a twenty-five percent (25%) discount to the Acquisition Price (as defined below), but shall in no event be no lower than \$0.01 per share. From and after the Adjusted Conversion Price Termination Date, the Conversion Price shall be determined as set forth in Section 1.2(a). For purposes hereof, “Adjusted Conversion Price Termination Date” shall mean, with respect to any proposed Change in Control for which a public announcement as contemplated by this Section 1.2(b) has been made, the date upon which the Borrower (in the case of clause (i) above) or the person, group or entity (in the case of clause (ii) above) consummates or publicly announces the termination or abandonment of the proposed Change in Control which caused this Section 1.2(b) to become operative. For purposes hereof, “Acquisition Price” shall mean a price per share of Common Stock derived by dividing (x) the total consideration (in cash, equity, earn- out or similar payments or otherwise) paid or to be paid to the Borrower or its shareholders in the Change in Control transaction by (y) the number of authorized shares of Common Stock outstanding as of the business day prior to the Announcement Date.

1.3 Authorized and Reserved Shares. The Borrower covenants that at all times until the Note is satisfied in full, the Borrower will reserve from its authorized and unissued Common Stock a sufficient number of shares, free from preemptive rights, to provide for the issuance of a number of Conversion Shares equal to (i) the number of Conversion Shares issuable upon the full conversion of this Note (assuming no payment of Principal Amount or interest) as of any issue date (taking into consideration any adjustments to the Conversion Price pursuant to Section 2 hereof or otherwise) multiplied by (ii) three (3) (the “Reserved Amount”). The initial Reserved Amount shall be 18,060,000 shares. In the event that the Borrower shall be unable to reserve the entirety of the Reserved Amount (the “Reserve Amount Failure”), the Borrower shall promptly take all actions necessary to increase its authorized share capital to accommodate the Reserved Amount (the “Authorized Share Increase”), including without limitation, all board of directors actions and approvals and promptly (but no less than sixty (60) days following the calling and holding a special meeting of its shareholders no more than sixty (60) days following the Reserve Amount Failure to seek approval of the Authorized Share Increase via the solicitation of proxies. Notwithstanding the foregoing, in no event shall the Reserved Amount be lower than the initial Reserved Amount, regardless of any prior conversions. The Borrower represents that upon issuance, the Conversion Shares will be duly and validly issued, fully paid and non- assessable. In addition, if the Borrower shall issue any securities or make any change to its capital structure which would change the number of Conversion Shares into which this Note shall be convertible at the then current Conversion Price, the Borrower shall at the same time make proper provision so that thereafter there shall be a sufficient number of shares of Common Stock authorized and reserved, free from preemptive rights, for conversion of this Note. The Borrower (i) acknowledges that it has irrevocably instructed its transfer agent to issue certificates for the Conversion Shares or instructions to have the Conversion Shares issued as contemplated by Section 1.4(f) hereof, and (ii) agrees that its issuance of this Note shall constitute full authority to its officers and agents who are charged with the duty of executing stock certificates or cause the Borrower to electronically issue shares of Common Stock to execute and issue the necessary certificates for the Conversion Shares or cause the Conversion Shares to be issued as contemplated by Section 1.4(f) hereof in accordance with the terms and conditions of this Note.

If, at any time the Borrower does not maintain the Reserved Amount it will be considered an Event of Default under this Note.

#### 1.4 Method of Conversion.

(a) Mechanics of Conversion. This Note may be converted by the Holder in whole or in part, on any Trading Day, while any amounts are outstanding hereunder, by submitting to the Borrower or Borrower's transfer agent a Notice of Conversion (by facsimile, e-mail or other reasonable means of communication dispatched on the Conversion Date prior to 11:59 p.m., New York, New York time). Any Notice of Conversion submitted after 11:59 p.m., New York, New York time, shall be deemed to have been delivered and received on the next Trading Day.

(b) Surrender of Note Upon Conversion. Notwithstanding anything to the contrary set forth herein, upon conversion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Borrower unless the entire unpaid Principal Amount is so converted. The Holder and the Borrower shall maintain records showing the Principal Amount so converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holder and the Borrower, so as not to require physical surrender of this Note upon each such conversion. In the event of any dispute or discrepancy, such records of the Borrower shall, *prima facie*, be controlling and determinative in the absence of manifest error. Notwithstanding the foregoing, if any portion of this Note is converted as aforesaid, the Holder may not transfer this Note unless the Holder first physically surrenders this Note to the Borrower, whereupon the Borrower will forthwith issue and deliver upon the order of the Holder a new Note of like tenor, registered as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, representing in the aggregate the remaining unpaid Principal Amount of this Note. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of a portion of this Note, the unpaid and unconverted Principal Amount of this Note represented by this Note may be less than the amount stated on the face hereof.

(c) Payment of Taxes. The Borrower shall not be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock or other securities or property on conversion of this Note in a name other than that of the Holder (or in street name), and the Borrower shall not be required to issue or deliver any such shares or other securities or property unless and until the person or persons (other than the Holder or the custodian in whose street name such shares are to be held for the Holder's account) requesting the issuance thereof shall have paid to the Borrower the amount of any such tax or shall have established to the satisfaction of the Borrower that such tax has been paid.

(d) Delivery of Common Stock Upon Conversion. Upon receipt by the Borrower from the Holder of a facsimile transmission or e-mail (or other reasonable means of communication) of a Notice of Conversion meeting the requirements for conversion as provided in this Section 1.4, the Borrower shall issue and deliver or cause to be issued and delivered to or upon the order of the Holder certificates for the Conversion Shares (or cause the electronic delivery of the Conversion Shares as contemplated by Section 1.4(f) hereof) within three (3) Trading Days after such receipt (the "Deadline") (and, solely in the case of conversion of the entire unpaid Principal Amount and interest (including any Default Interest) under this Note, surrender of this Note). If the Borrower shall fail for any reason or for no reason to issue to the Holder on or prior to the Deadline a certificate for the number of Conversion Shares or to which the Holder is entitled hereunder and register such Conversion Shares on the Borrower's share register or to credit the Holder's balance account with DTC (as defined below) for such number of Conversion Shares to which the Holder is entitled upon the Holder's conversion of this Note (a "Conversion Failure"), then, in addition to all other remedies available to the Holder, (i) the Borrower shall pay in cash to the Holder on each day after the Deadline and during such Conversion Failure an amount equal to two percent (2.0%) of the product of (A) the sum of the number of Conversion Shares not issued to the Holder on or prior to the Deadline and to which the Holder is entitled and (B) the closing sale price of the Common Stock on the Trading Day immediately preceding the last possible date which the Borrower could have issued such Conversion Shares to the Holder without violating this Section 1.4(d); and (ii) the Holder, upon written notice to the Borrower, may void its Notice of Conversion with respect to, and retain or have returned, as the case may be, any portion of this Note that has not been converted pursuant to such Notice of Conversion; provided that the voiding of an Notice of Conversion shall not affect the Borrower's obligations to make any payments which have accrued prior to the date of such notice. In addition to the foregoing, if on or prior to the Deadline the Borrower shall fail to issue and deliver a certificate to the Holder and register such Conversion Shares on the Borrower's share register or credit the Holder's balance account with DTC for the number of Conversion Shares to which the Holder is entitled upon the Holder's exercise hereunder or pursuant to the Borrower's obligation pursuant to clause (ii) below, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Borrower, then the Borrower shall, within two (2) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other reasonable and customary out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "Buy-In Price"), at which point the Borrower's obligation to deliver such certificate (and to issue such Conversion Shares) or credit such Holder's balance account with DTC for such Conversion Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Conversion Shares or credit such Holder's balance account with DTC and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the closing sales price of the Common Stock on the date of exercise. Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Borrower's failure to timely deliver certificates representing the Conversion Shares (or to electronically deliver such Conversion Shares) upon the conversion of this Note as required pursuant to the terms hereof.

(e) Obligation of Borrower to Deliver Common Stock. At the time that the Holder submits the Notice of Conversion to the Borrower or Borrower's transfer agent, the Holder shall be deemed to be the holder of record of the Conversion Shares issuable upon such conversion, the outstanding Principal Amount and the amount of accrued and unpaid interest (including any Default Interest) under this Note shall be reduced to reflect such conversion, and, unless the Borrower defaults on its obligations under this Article I, all rights with respect to the portion of this Note being so converted shall forthwith terminate except the right to receive the Common Stock or other securities, cash or other assets, as herein provided, on such conversion. If the Holder shall have given a Notice of Conversion as provided herein, the Borrower's obligation to issue and deliver the certificates for the Conversion Shares (or cause the electronic delivery of the Conversion Shares as contemplated by Section 1.4(f) hereof) shall be absolute and unconditional, irrespective of the absence of any action by the Holder to enforce the same, any waiver or consent with respect to any provision thereof, the recovery of any judgment against any person or any action to enforce the same, any failure or delay in the enforcement of any other obligation of the Borrower to the holder of record, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder of any obligation to the Borrower, and irrespective of any other circumstance which might otherwise limit such obligation of the Borrower to the Holder in connection with such conversion. The Conversion Date specified in the Notice of Conversion shall be the Conversion Date so long as the Notice of Conversion is sent to the Borrower or Borrower's transfer agent before 11:59 p.m., New York, New York time, on such date.

(f) Delivery of Conversion Shares by Electronic Transfer. In lieu of delivering physical certificates representing the Conversion Shares issuable upon conversion hereof, provided the Borrower is participating in the Depository Trust Borrower ("DTC") Fast Automated Securities Transfer or Deposit/Withdrawal at Custodian programs, upon request of the Holder and its compliance with the provisions contained in Section 1.1 and in this Section 1.4, the Borrower shall use its reasonable best efforts to cause its transfer agent to electronically transmit the Conversion Shares issuable upon conversion hereof to the Holder by crediting the account of Holder's Prime Broker with DTC through its Deposit Withdrawal Agent Commission system.

1.5 Concerning the Shares. The Conversion Shares issuable upon conversion of this Note may not be sold or transferred unless (i) such shares are sold pursuant to an effective registration statement or otherwise qualified for sale pursuant to Regulation A pursuant to inclusion in a qualified Form 1-A filing under the 1933 Act; or (ii) the Borrower or its transfer agent shall have been furnished with an opinion of counsel (which opinion shall be the Legal Counsel Opinion (as defined in the Purchase Agreement)) to the effect that the shares to be sold or transferred may be sold or transferred pursuant to an exemption from such registration; or (iii) such shares are sold or transferred pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption; or (iv) such shares are transferred to an "affiliate" (as defined in Rule 144) of the Borrower who agrees to sell or otherwise transfer the shares only in accordance with this Section 1.5 and who is an Accredited Investor (as defined in the Purchase Agreement). Except as otherwise provided in the Purchase Agreement (and subject to the removal provisions set forth below), until such time as the Conversion Shares have been registered under the 1933 Act or otherwise may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, each certificate for the Conversion Shares that has not been so included in an effective registration statement or that has not been sold pursuant to an effective registration statement or an exemption that permits removal of the legend, shall bear a legend substantially in the following form, as appropriate:

**"NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH MAY BE THE LEGAL COUNSEL OPINION (AS DEFINED IN THE PURCHASE AGREEMENT)), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144, RULE 144A, REGULATION S, OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES."**

The legend set forth above shall be removed and the Borrower shall issue to the Holder a certificate for the applicable Conversion Shares without such legend upon which it is stamped or (as requested by the Holder) issue the applicable Conversion Shares by electronic delivery by crediting the account of such holder's broker with DTC, if, unless otherwise required by applicable state securities laws: (a) such Conversion Shares are registered for sale under an effective registration statement filed under the 1933 Act or otherwise may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, or (b) the Borrower or the Holder provides the Legal Counsel Opinion (as contemplated by and in accordance with Section 4(m) of the Purchase Agreement) to the effect that a public sale or transfer of such Conversion Shares may be made without registration under the 1933 Act, which opinion shall be accepted by the Borrower so that the sale or transfer is effected. The Borrower shall be responsible for the fees of its transfer agent and all DTC fees associated with any such issuance. The Holder agrees to sell all Conversion Shares, including those represented by a certificate(s) from which the legend has been removed, in compliance with applicable prospectus delivery requirements, if any. In the event that the Borrower does not accept the opinion of counsel provided by the Holder with respect to the transfer of Conversion Shares pursuant to an exemption from registration, such as Rule 144, Rule 144A or Regulation S, at the Deadline, notwithstanding that the conditions of Rule 144, Rule 144A, Regulation S, or other applicable exemption, as applicable, have been met, it will be considered an Event of Default under this Note.

#### 1.6 Effect of Certain Events.

(a) Effect of Merger, Consolidation, Etc. At the option of the Holder, the sale, conveyance or disposition of all or substantially all of the assets of the Borrower, or the consolidation, merger or other business combination of the Borrower with or into any other Person (as defined below) or Persons when the Borrower is not the survivor shall either: (i) be deemed to be an acceleration event pursuant to which the Borrower shall be required to pay to the Holder upon the consummation of an amount equal to Principal Amount plus accrued but unpaid interest or (ii) be treated pursuant to Section 1.6(b) hereof. "Person" shall mean any individual, corporation, limited liability Borrower, partnership, association, trust or other entity or organization.

(b) Adjustment Due to Merger, Consolidation, Etc. If, at any time when this Note is issued and outstanding and prior to conversion of all of this Note, there shall be any merger, consolidation, exchange of shares, recapitalization, reorganization, or other similar event, as a result of which shares of Common Stock of the Borrower shall be changed into the same or a different number of shares of another class or classes of stock or securities of the Borrower or another entity, or in case of any sale or conveyance of all or substantially all of the assets of the Borrower other than in connection with a plan of complete liquidation of the Borrower, then the Holder of this Note shall thereafter have the right to receive upon conversion of this Note, upon the basis and upon the terms and conditions specified herein and in lieu of the shares of Common Stock immediately theretofore issuable upon conversion, such stock, securities or assets which the Holder would have been entitled to receive in such transaction had this Note been converted in full immediately prior to such transaction (without regard to any limitations on conversion set forth herein), and in any such case appropriate provisions shall be made with respect to the rights and interests of the Holder of this Note to the end that the provisions hereof (including, without limitation, provisions for adjustment of the Conversion Price and of the number of shares issuable upon conversion of the Note) shall thereafter be applicable, as nearly as may be practicable in relation to any securities or assets thereafter deliverable upon the conversion hereof. The Borrower shall not effectuate any transaction described in this Section 1.6(b) unless (a) it first gives, to the extent practicable, at least thirty (30) days prior written notice (but in any event at least seven (7) days prior written notice) of the record date of the special meeting of shareholders to approve, or if there is no such record date, the consummation of, such merger, consolidation, exchange of shares, recapitalization, reorganization or other similar event or sale of assets (during which time the Holder shall be entitled to convert this Note) and (b) the resulting successor or acquiring entity (if not the Borrower) assumes by written instrument the obligations of this Section 1.6(b). The above provisions shall similarly apply to successive consolidations, mergers, sales, transfers or share exchanges.



(c) Adjustment Due to Distribution. If the Borrower shall declare or make any distribution of its assets (or rights to acquire its assets) to holders of Common Stock as a dividend, stock repurchase, by way of return of capital or otherwise (including any dividend or distribution to the Borrower's shareholders in cash or shares (or rights to acquire shares) of capital stock of a subsidiary (i.e., a spin-off)) (a "Distribution"), then the Holder of this Note shall be entitled, upon any conversion of this Note after the date of record for determining shareholders entitled to such Distribution, to receive the amount of such assets which would have been payable to the Holder with respect to the shares of Common Stock issuable upon such conversion had such Holder been the holder of such shares of Common Stock on the record date for the determination of shareholders entitled to such Distribution.

(d) Purchase Rights. If, at any time when all or any portion of this Note is issued and outstanding, the Borrower issues any convertible securities or rights to purchase stock, warrants, securities or other property (the "Purchase Rights") pro rata to the record holders of Common Stock, then the Holder of this Note will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which such Holder could have acquired if such Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without regard to any limitations on conversion contained herein) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(e) Dilutive Issuance. If the Borrower, at any time while this Note or any amounts due hereunder are outstanding, issues, sells or grants (or has issued, sold or granted as of the Issue Date, as the case may be) any option to purchase, or sells or grants any right to reprice, or otherwise disposes of, or issues (or has sold or issued, as the case may be, or announces any sale, grant or any option to purchase or other disposition), securities convertible into, exercisable for, or otherwise entitle any person or entity the right to acquire, shares of Common Stock (including, without limitation, upon conversion of this Note, and any convertible notes or warrants outstanding as of or following the Issue Date), in each or any case at an effective price per share that is lower than the then Conversion Price (such lower price, the "Base Conversion Price" and such issuances, collectively, a "Dilutive Issuance") (it being agreed that if the holder of the Common Stock or other securities so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced, at the option of the Holder, to a price equal the Base Conversion Price. If the Borrower enters into a Variable Rate Transaction, despite the prohibition set forth in the Purchase Agreement, the Borrower shall be deemed to have issued Common Stock or Common Stock Equivalents at the lowest possible price per share at which such securities could be issued in connection with such Variable Rate Transaction. Such adjustment shall be made whenever such Common Stock or other securities are issued. Notwithstanding the foregoing, no adjustment will be made under this Section 1.6(e) in respect of an Exempt Issuance. In the event of an issuance of securities involving multiple tranches or closings, any adjustment pursuant to this Section 1.6(e) shall be calculated as if all such securities were issued at the initial closing. This Section shall also be subject to the mechanics of Section 1.6(g) "Pending Legislation" clause herein.

An "Exempt Issuance" shall mean the issuance of (a) shares of Common Stock or other securities to officers or directors of the Borrower pursuant to any stock or option or similar equity incentive plan duly adopted for such purpose, by a majority of the non-employee members of the Borrower's Board of Directors or a majority of the members of a committee of non-employee directors ("Plan") established for such purpose in a manner which is consistent with the Borrower's prior business practices or in settlement of accrued but unpaid compensation and/or benefits regardless of whether such securities were issued from a Plan or in settlement of vendor payables; (b) securities issued pursuant to a merger, consolidation, acquisition or similar business combination approved by a majority of the disinterested directors of the Borrower, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating Borrower or an owner of an asset in a business synergistic with the business of the Borrower and shall provide to the Borrower additional benefits in addition to the investment of funds, but shall not include a transaction in which the Borrower is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities; (c) securities issued pursuant to any equipment loan or leasing arrangement, real property leasing arrangement or debt financing from a bank or similar financial institution approved by a majority of the disinterested directors of the Borrower; (d) securities issued under the S-1 filed and declared effective by the Securities and Exchange Commission as of the date hereof; (e) existing convertible debt and equity lines of credit in existence on the date hereof, (f) private placements of Common Stock by the Borrower; and/or (g) securities issued with respect to which the Holder waives its rights in writing under this Section 1.6(e).

(f) Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price as a result of the events described in this Section 1.6, the Borrower, at its expense, shall promptly compute such adjustment or readjustment and prepare and furnish to the Holder a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Borrower shall, upon the written request at any time of the Holder, furnish to such Holder a like certificate setting forth (i) such adjustment or readjustment, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon conversion of the Note.

(g) Pending Legislation. As of the Issue Date hereof, proposed legislation exists, namely proposed amendments to Rule 144(d)(3)(ii) proposed on December 22, 2020 in SEC Release 2020-336, that would fundamentally change the economic terms of this Note. In the event the rule becomes law and becomes effective while any amounts are outstanding under this Note, Section 1.2 hereof shall be automatically amended to contain only the Fixed Conversion Price of \$0.02 per share. In the event that the Borrower is in default of any of the provisions of the Note or other Transaction Documents, and the Borrower has not cured said default within five (5) calendar days, the fixed conversion price shall be reduced to \$0.01 per share (the “Default Fixed Price”) in addition to any other principal adjustments, default interest, or other remedies available to it under law. In the event the final rule, or any other combination of final rules, make this provision inoperable, invalid, or otherwise have an effect that changes the economics of the transactions contemplated hereby, the pertinent clause or mechanic of operation shall be stricken and only the Fixed Price provision shall remain.

1.7 Adjustments to Conversion Price. At any time after the Issue Date, (i) if in the case that the Borrower’s Common Stock is not deliverable by DWAC (including if the Borrower’s transfer agent has a policy prohibiting or limiting delivery of shares of the Borrower’s Common Stock specified in a Notice of Conversion); (ii) if the Borrower ceases to be a reporting Borrower pursuant or subject to the Exchange Act; (iii) if after the Borrower gets listed on a trading market, the Borrower subsequently loses a market (including the OTC Pink Market, OTCQB® Venture Market or an equivalent replacement exchange) for its Common Stock; (iv) if the Borrower fails to maintain its status as “DTC Eligible” for any reason; (v) if the Note cannot be converted into free trading shares on or after six (6) months from the Issue Date; (vi) if at any time the Borrower does not maintain or replenish the Reserved Amount (as defined herein) within three (3) business days of the request of the Holder; (vii) if the Borrower fails to comply with the reporting requirements of the Exchange Act; the reporting requirements necessary to satisfy the availability of Rule 144 to the Holder or its assigns, including but not limited to the timely fulfillment of its filing requirements as a fully- reporting issuer registered with the SEC; (ix) if the Borrower effectuates a reverse split of its Common Stock without twenty (20) days prior written notice to the Holder; (x) if, once listed, subsequently OTC Markets changes the Borrower’s designation to ‘No Information’ (Stop Sign) or ‘Caveat Emptor’ (Skull and Crossbones); (xi) the restatement of any financial statements filed by the Borrower with the SEC for any date or period from two (2) years prior to the Issue Date of this Note and until this Note is no longer outstanding, if the result of such restatement would, by comparison to the un-restated financial statement, have constituted a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement; (xii) once it begins trading on any of the trading markets or exchanges listed hereafter, any cessation of trading of the Common Stock on at least one of the OTC Markets including but not limited to the OTC Pink Market, or an equivalent replacement exchange, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market, the New York Stock Exchange, or the NYSE MKT, and such cessation of trading shall continue for a period of five consecutive (5) Trading Days; and/or (xiii) the Borrower loses the “bid” price for its Common Stock (\$0.0001 on the “Ask” with zero market makers on the “Bid” per Level 2); and/or (xiv) if the Holder is notified in writing by the Borrower or the Borrower’s transfer agent that the Borrower does not have the necessary amount of authorized and issuable shares of Common Stock available to satisfy the issuance of Shares pursuant to a Conversion Notice, then in addition to all other remedies under this Note, the Holder shall be entitled to increase, by fifteen percent (15%) for each occurrence, cumulative or otherwise, the discount to the Conversion Price shall apply for all future conversions under the Note.

1.8 Status as Shareholder. Upon submission of a Notice of Conversion by a Holder, (i) the Conversion Shares covered thereby (other than the Conversion Shares, if any, which cannot be issued because their issuance would exceed such Holder's allocated portion of the Reserved Amount or Maximum Share Amount) shall be deemed converted into shares of Common Stock, and (ii) the Holder's rights as a Holder of such converted portion of this Note shall cease and terminate, excepting only the right to receive certificates for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Borrower to comply with the terms of this Note. Notwithstanding the foregoing, if a Holder has not received certificates for all shares of Common Stock prior to the tenth (10th) business day after the expiration of the Deadline with respect to a conversion of any portion of this Note for any reason, then (unless the Holder otherwise elects to retain its status as a holder of Common Stock by so notifying the Borrower) the Holder shall regain the rights of a Holder of this Note with respect to such unconverted portions of this Note and the Borrower shall, as soon as practicable, return such unconverted Note to the Holder or, if the Note has not been surrendered, adjust its records to reflect that such portion of this Note has not been converted. In all cases, the Holder shall retain all of its rights and remedies for the Borrower's failure to convert this Note.

1.9 Prepayment. Notwithstanding anything to the contrary contained in this Note, subject to the terms of this Section, at any time during the period beginning on the Issue Date and ending at Maturity ("Prepayment Termination Date"), Borrower shall have the right, exercisable on not less than five (5) Trading Days prior written notice to the Holder of this Note, to prepay up to the outstanding balance on this Note (principal and accrued interest), in full, in accordance with this Section. Any notice of prepayment hereunder (an "Optional Prepayment Notice") shall be delivered to the Holder of the Note at its registered addresses and shall state: (1) that the Borrower is exercising its right to prepay the Note, and (2) the date of prepayment which shall be not more than fifteen (15) Trading Days from the date of the Optional Prepayment Notice; and (3) the amount (in dollars) that the Borrower is paying. Notwithstanding Holder's receipt of the Optional Prepayment Notice the Holder may convert, or continue to convert the Note in whole or in part until the Optional Prepayment Amount (as defined herein) is paid to the Holder. On the date fixed for prepayment (the "Optional Prepayment Date"), the Borrower shall make payment of the Optional Prepayment Amount (as defined below) to or upon the order of the Holder as specified by the Holder in writing to the Borrower at least one (1) business day prior to the Optional Prepayment Date. If the Borrower exercises its right to prepay the Note, the Borrower shall make payment to the Holder of one hundred fifteen percent (115%) of the total amount outstanding under the Note including, but not limited to all principal, interest, fees, and defaults (the "Optional Prepayment Amount").

## **ARTICLE II. RANKING AND CERTAIN COVENANTS**

2.1 Ranking and Security. The obligations of the Borrower under this Note shall be subordinate with respect to any and all Indebtedness incurred as of or following the Issue Date.

**2.2 Other Indebtedness.** So long as the Borrower shall have any obligation under this Note, the Borrower shall not (directly or indirectly through any Subsidiary or affiliate) incur or suffer to exist or guarantee any Indebtedness that is senior to or pari passu with (in priority of payment and performance) the Borrower's obligations hereunder unless the proceeds of such Indebtedness are used to pay off the interest and principal under this Note. As used in this Section 2.2, the term "Borrower" means the Borrower and any Subsidiary of the Borrower. As used herein, the term "Indebtedness" means (a) all indebtedness of the Borrower for borrowed money, but not including deferred purchase price obligations in place as of the Issue Date and as disclosed in the SEC Documents or obligations to trade creditors incurred in the ordinary course of business, (b) all obligations of the Borrower evidenced by notes, bonds, debentures or other similar instruments, (c) purchase money indebtedness hereafter incurred by the Borrower to finance the purchase of fixed or capital assets, including all capital lease obligations of the Borrower which do not exceed the purchase price of the assets funded, (d) all guarantee obligations of the Borrower in respect of obligations of the kind referred to in clauses (a) through (c) above that the Borrower would not be permitted to incur or enter into, and (e) all obligations of the kind referred to in clauses (a) through (d) above that the Borrower is not permitted to incur or enter into that are secured and/or unsecured by (or for which the holder of such obligation has an existing right, contingent or otherwise, to be secured and/or unsecured by) any lien or encumbrance on property (including accounts and contract rights) owned by the Borrower, whether or not the Borrower has assumed or become liable for the payment of such obligation.

**2.3 Distributions on Capital Stock.** So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent (a) pay, declare or set apart for such payment, any dividend or other distribution (whether in cash, property or other securities) on shares of capital stock other than dividends on shares of Common Stock solely in the form of additional shares of Common Stock or (b) directly or indirectly or through any subsidiary make any other payment or distribution in respect of its capital stock except for distributions pursuant to any shareholders' rights plan which is approved by a majority of the Borrower's disinterested directors or as may be permitted pursuant to Section 1.6(e).

**2.4 Restriction on Stock Repurchases.** So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent redeem, repurchase or otherwise acquire (whether for cash or in exchange for property or other securities or otherwise) in any one transaction or series of related transactions any shares of capital stock of the Borrower or any warrants, rights or options to purchase or acquire any such shares.

**2.5 Sale of Assets.** So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, sell, lease or otherwise dispose of any significant portion of its assets other than in an arm's length transaction. Any consent to the disposition of any assets may be conditioned on a specified use of the proceeds of disposition, but otherwise such consent shall not be unreasonably withheld, conditioned, or delayed.

**2.6 Advances and Loans; Affiliate Transactions.** So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, lend money, give credit, make advances to or enter into any transaction with any person, firm, joint venture or corporation, including, without limitation, officers, directors, employees, subsidiaries and affiliates of the Borrower, except loans, credits or advances (a) in existence or committed on the Issue Date and which the Borrower has informed Holder in writing prior to the Issue Date, (b) in regard to transactions with unaffiliated third parties, made in the ordinary course of business or (c) in regard to transactions with unaffiliated third parties, not in excess of \$250,000. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, repay any affiliate (as defined in Rule 144) of the Borrower in connection with any indebtedness or accrued amounts owed to any such party outside the ordinary course of business.

2.7 Section 3(a)(9) or 3(a)(10) Transaction. So long as this Note is outstanding, the Borrower shall not enter into any transaction or arrangement structured in accordance with, based upon, or related or pursuant to, in whole or in part, either Section 3(a)(9) of the Securities Act (a “3(a)(9) Transaction”) or Section 3(a)(10) of the Securities Act (a “3(a)(10) Transaction”). In the event that the Borrower does enter into, or makes any issuance of Common Stock related to a 3(a)(9) Transaction or a 3(a)(10) Transaction while this note is outstanding, a liquidated damages charge of twenty-five percent (25%) of the outstanding principal balance of this Note, but not less than Twenty-Five Thousand Dollars (\$25,000), will be assessed and will become immediately due and payable to the Holder at its election in the form of a cash payment or added to the balance of this Note (under Holder’s and Borrower’s expectation that this amount will tack back to the Issue Date). Notwithstanding the forgoing, transactions contemplated in the second paragraph (a) of Section 1.6(e) that may be considered Section 3(a)(9) or 3(a)(10) transactions are permissible and will not cause a liquidated damages charge.

2.8 Preservation of Business and Existence, etc. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder’s written consent, (a) change the nature of its business in a material respect; or (b) sell, divest, change the structure of any material assets other than in the ordinary course of business. In addition, so long as the Borrower shall have any obligation under this Note, the Borrower shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, its existence, rights and privileges, and become or remain, and cause each of its Subsidiaries (other than dormant Subsidiaries that have no or minimum assets) to become or remain, duly qualified and in good standing in each jurisdiction in which the character of the properties owned or leased by it or in which the transaction of its business makes such qualification necessary. Furthermore, so long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder’s written consent, solicit any offers for, respond to any unsolicited offers for, or conduct any negotiations with, any other person or entity with respect to any Variable Rate Transaction or investment.

2.9 Non-circumvention. The Borrower hereby covenants and agrees that the Borrower will not, by amendment of its Certificate or Articles of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, and will at all times in good faith carry out all the provisions of this Note and take all action as may be required to protect the rights of the Holder.

2.10 Lost, Stolen or Mutilated Note. Upon receipt by the Borrower of evidence reasonably satisfactory to the Borrower of the loss, theft, destruction or mutilation of this Note, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Borrower in customary form and, in the case of mutilation, upon surrender and cancellation of this Note, the Borrower shall execute and deliver to the Holder a new Note.

## ARTICLE III. EVENTS OF DEFAULT

It shall be considered an event of default if any of the following events listed in this Article III (each, an “Event of Default”) shall occur:

3.1 Conversion and the Shares. The Borrower (i) fails to issue Conversion Shares to the Holder (or announces or threatens in writing that it will not honor its obligation to do so) upon exercise by the Holder of the conversion rights of the Holder in accordance with the terms of this Note; (ii) fails to transfer or cause its transfer agent to transfer (issue) (electronically or in certificated form) any certificate for the Conversion Shares issuable to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note; (iii) fails to reserve the Reserved Amount at all times; or (iv) the Borrower directs its transfer agent not to transfer or delays, impairs, and/or hinders its transfer agent in transferring (or issuing) (electronically or in certificated form) any certificate for the Conversion Shares issuable to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note, or fails to remove (or directs its transfer agent not to remove or impairs, delays, and/or hinders its transfer agent from removing) any restrictive legend (or to withdraw any stop transfer instructions in respect thereof) on any certificate for any Conversion Shares issued to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note (or makes any written announcement, statement or threat that it does not intend to honor the obligations described in this paragraph) and any such failure shall continue uncured (or any written announcement, statement or threat not to honor its obligations shall not be rescinded in writing) for five (5) Trading Days after the Holder shall have delivered a Notice of Conversion. It is an obligation of the Borrower to remain current in its obligations to its transfer agent. It shall be an Event of Default of this Note, if a conversion of this Note is delayed, hindered or frustrated due to a balance owed by the Borrower to its transfer agent. If at the option of the Holder, the Holder advances any funds to the Borrower’s transfer agent in order to process a conversion, such advanced funds shall be paid by the Borrower to the Holder within forty-eight (48) hours of a demand from the Holder.

3.2 Breach of Agreements and Covenants. The Borrower materially breaches any agreement, covenant or other term or condition contained in the Purchase Agreement, this Note, the Irrevocable Transfer Agent Instructions or in any agreement, statement or certificate given in writing pursuant hereto or in connection herewith or therewith.

3.3 Breach of Representations and Warranties. Any material breach of any representation or warranty of the Borrower made in the Purchase Agreement, this Note, the Irrevocable Transfer Agent Instructions or in any agreement, statement or certificate given in writing pursuant hereto or in connection herewith or therewith shall be false or misleading in any material respect when made and the breach of which has (or with the passage of time will have) a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.4 Receiver or Trustee. The Borrower or any subsidiary of the Borrower shall make an assignment for the benefit of creditors, or apply for or consent to the appointment of a receiver or trustee for it or for a substantial part of its property or business, or such a receiver or trustee shall otherwise be appointed.

3.5 Judgments. Any money judgment, writ or similar process shall be entered or filed against the Borrower or any subsidiary of the Borrower or any of its property or other assets for more than \$300,000.00, and shall remain unvacated, unbonded or unstayed for a period of twenty (20) days unless otherwise consented to by the Holder, which consent will not be unreasonably withheld.

3.6 Bankruptcy. Bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings, voluntary or involuntary, for relief under any bankruptcy law or any law for the relief of debtors shall be instituted by or against the Borrower or any subsidiary of the Borrower.

3.7 Delisting of Common Stock. Once the Borrower obtains a listing, the Borrower should subsequently fail to maintain the listing of the Common Stock on at least one of the OTC Markets, including, but not limited to the OTC Pink Market, any level of the NASDAQ Markets or the New York Stock Exchange (including the NYSE MKT).

3.8 Failure to Comply with the 1934 Act. At any time after the Issue Date, the Borrower shall fail to comply in all material respects with the reporting requirements of the 1934 Act and/or the Borrower shall cease to be subject to the reporting requirements of the 1934 Act. It shall be an Event of Default under this section if the Borrower shall file any Notification of Late Filing on Form 12b-25 with the SEC.

3.9 Liquidation. Any dissolution, liquidation, or winding up of Borrower or any substantial portion of its business.

3.10 Cessation of Operations. Any cessation of operations by Borrower or Borrower admits it is otherwise generally unable to pay its debts as such debts become due, provided, however, that any disclosure of the Borrower's ability to continue as a "going concern" shall not be an admission that the Borrower cannot pay its debts as they become due.

3.11 [RESERVED]

3.12 Financial Statement Restatement. The restatement of any financial statements filed by the Borrower with the SEC for any date or period from two (2) years prior to the Issue Date of this Note and until this Note is no longer outstanding, if the result of such restatement would, by comparison to the un-restated financial statement, have constituted a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.13 Reverse Splits. The Borrower effectuates a reverse split of its Common Stock without twenty (20) days prior written notice to the Holder.

3.14 Replacement of Transfer Agent. In the event that the Borrower proposes to replace its transfer agent, the Borrower fails to provide, prior to the effective date of such replacement, a fully executed Irrevocable Transfer Agent Instructions in a form as initially delivered pursuant to the Purchase Agreement (including but not limited to the provision to irrevocably reserve shares of Common Stock in the Reserved Amount) signed by the successor transfer agent to Borrower and the Borrower.

3.15 DTC "Chill". The DTC places a "chill" (i.e. a restriction placed by DTC on one or more of DTC's services, such as limiting a DTC participant's ability to make a deposit or withdrawal of the security at DTC) on any of the Borrower's securities.

3.16 [RESERVED]

3.17. DWAC Eligibility. In addition to the Event of Default in Section 3.16, the Common Stock is otherwise not eligible for trading through the DTC's Fast Automated Securities Transfer or Deposit/Withdrawal at Custodian programs.

3.18 Variable Rate Transactions; Dilutive Issuances. The Borrower (i) issues shares of Common Stock (or convertible securities or Purchase Rights) pursuant to an equity line of credit of the Borrower or otherwise in connection with a Variable Rate Transaction (entered into in the future) except for existing lines of credit or Variable Rate Transactions existing as of the date hereof; (ii) adjusts downward the "floor price" at which shares of Common Stock (or convertible securities or Purchase Rights) may be issued under an equity line of credit or otherwise in connection with a Variable Rate Transaction (or entered into in the future) except for existing lines of credit or Variable Rate Transactions existing as of the date hereof; or (iii) a Dilutive Issuance is triggered as provided in this Note.

3.19 Bid Price. Once the Borrower obtains a listing, the Borrower shall subsequently lose the "bid" price for its Common Stock (\$0.0001 on the "Ask" with zero market makers on the "Bid" per Level 2) and/or a market (including the OTC Pink, OTCQB or an equivalent replacement marketplace or exchange).

3.20 Inside Information. Any attempt by the Borrower or its officers, directors, and/or affiliates to intentionally transmit, convey, disclose, or any actual transmittal, conveyance, or disclosure by the Borrower or its officers, directors, and/or affiliates of, material non-public information concerning the Borrower, to the Holder or its successors and assigns, which is not immediately cured by Borrower's filing of a Form 8-K pursuant to Regulation FD on that same date

3.21 Unavailability of Rule 144. If, at any time on or after the date which is six (6) months after the Issue Date, except due to the Holder's actions or inactions, the Holder is unable to (i) obtain a standard "144 legal opinion letter" from an attorney reasonably acceptable to the Holder, the Holder's brokerage firm (and respective clearing firm), and the Borrower's transfer agent in order to facilitate the Holder's conversion of any portion of the Note into free trading shares of the Borrower's Common Stock pursuant to Rule 144, and/or (ii) thereupon deposit such shares into the Holder's brokerage account.

3.22 Suspension of Trading of Common Stock. If, at any time on or after the Borrower obtains a listing, the Borrower's Common Stock (i) is suspended from trading; or (ii) halted from trading.

3.23 [RESERVED]

3.24 Rights and Remedies Upon an Event of Default. Upon the occurrence and during the continuation of any Event of Default specified in this Article III, this Note shall become immediately due and payable and the Borrower shall pay to the Holder, in full satisfaction of its obligations hereunder, an amount (the "Default Amount") equal to the Principal Amount then outstanding plus accrued interest (including any Default Interest) through the date of full repayment multiplied by one hundred twenty-five percent (125%). Holder may, in its sole discretion, determine to accept payment in Common Stock or part in Common Stock and part in cash. For purposes of payments in Common Stock, the conversion formula set forth in Section 1.2 shall apply. Upon an uncured Event of Default, all amounts payable hereunder shall immediately become due and payable, all without demand, presentment or notice, all of which hereby are expressly waived by the Borrower, together with all costs, including, without limitation, legal fees and expenses, of collection, and the Holder shall be entitled to exercise all other rights and remedies available at law or in equity, including, without limitation.

3.25 Default Monitoring Fee. Upon the occurrence of any Event of Default in this Article III, Borrower shall pay to Holder a monitoring fee of \$5,000.00 per month so long as any amount due is outstanding under this Note. Such monitoring fee shall be paid, in Holder's sole discretion, (i) in cash within five (5) business days of the end of the month in which the fee was charged; or (ii) added as principal to the Note.

#### ARTICLE IV. MISCELLANEOUS

4.1 Failure or Indulgence Not Waiver. No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privileges. All rights and remedies of the Holder existing hereunder are cumulative to, and not exclusive of, any rights or remedies otherwise available.

4.2 Notices. All notices, demands, requests, consents, approvals, and other communications required or permitted hereunder shall be in writing and, unless otherwise specified herein, shall be (i) personally served, (ii) deposited in the mail, registered or certified, return receipt requested, postage prepaid, (iii) delivered by reputable air courier service with charges prepaid, or (iv) transmitted by hand delivery, telegram, e-mail or facsimile, addressed as set forth below or to such other address as such party shall have specified most recently by written notice. Any notice or other communication required or permitted to be given hereunder shall be deemed effective (a) upon hand delivery or delivery by e-mail or facsimile, with accurate confirmation generated by the transmitting facsimile machine, at the address or number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

If to the Borrower, to:

**RESPIRERX PHARMACEUTICALS INC.**

126 Valley Road, Suite C  
Glen Rock, New Jersey 07452  
Attention: Jeff Margolis  
e-mail: [jmargolis@respirerx.com](mailto:jmargolis@respirerx.com)

With a copy by e-mail only to (which copy shall not constitute notice):



**FAEGRE DRINKER BIDDLE & REATH LLP**

One Logan Square, Suite 2000  
Philadelphia, PA 19102  
Attn: Ms. Elizabeth Diffley  
e-mail: Elizabeth.diffley@faegredrinker.com

If to the Holder:

**FIRSTFIRE GLOBAL OPPORTUNITIES FUND LLC**

1040 First Avenue, Suite 190 New York, NY 10022 Attention: Eli Fireman  
e-mail: eli@firstfirecapital.com

With a copy by e-mail only to (which copy shall not constitute notice):

**FABIAN VANCOTT**

215 South State Street, Suite 1200  
Salt Lake City, Utah 84111  
Attn: Anthony Michael Panek  
e-mail: apanek@fabianvancott.com

4.3 Amendments. This Note and any provision hereof may only be amended by an instrument in writing signed by the Borrower and the Holder. The term “Note” and all reference thereto, as used throughout this instrument, shall mean this instrument as originally executed, or if later amended or supplemented, then as so amended or supplemented.

4.4 Assignability. This Note shall be binding upon the Borrower and its successors and assigns, and shall inure to be the benefit of the Holder and its successors and assigns. Neither the Borrower nor the Holder shall assign this Note or any rights or obligations hereunder without the prior written consent of the other. Notwithstanding the foregoing, the Holder may assign its rights hereunder to any “accredited investor” (as defined in Rule 501(a) of the 1933 Act) in a private transaction from the Holder or to any of its “affiliates”, as that term is defined under the 1934 Act, without the consent of the Borrower. Notwithstanding anything in this Note to the contrary, this Note may be pledged as collateral in connection with a bona fide margin account or other lending arrangement. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that following conversion of a portion of this Note, the unpaid and unconverted principal amount of this Note represented by this Note may be less than the amount stated on the face hereof.

4.5 Cost of Collection. If default is made in the payment of this Note, the Borrower shall pay the Holder hereof costs of collection, including reasonable attorneys’ fees.

4.6 Governing Law; Venue; Attorney's Fees. This Note shall be governed by and construed in accordance with the laws of the State of New York without regard to principles of conflicts of laws. Any action brought by either party against the other concerning the transactions contemplated by this Note or any other agreement, certificate, instrument or document contemplated hereby shall be brought only in the state courts located in the state of New York or federal courts located in the state of New York. The Borrower hereby irrevocably waives any objection to jurisdiction and venue of any action instituted hereunder and shall not assert any defense based on lack of jurisdiction or venue or based upon *forum non conveniens*. **THE BORROWER HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTIONS CONTEMPLATED HEREBY.** Each party hereby irrevocably waives personal service of process and consents to process being served in any suit, action or proceeding in connection with this Note or any other agreement, certificate, instrument or document contemplated hereby or thereby by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Note 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 other manner permitted by law. The prevailing party in any action or dispute brought in connection with this the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby shall be entitled to recover from the other party its reasonable attorney's fees and costs.

4.7 Certain Amounts. Whenever pursuant to this Note the Borrower is required to pay an amount in excess of the outstanding Principal Amount (or the portion thereof required to be paid at that time) plus accrued and unpaid interest plus Default Interest on such interest, the Borrower and the Holder agree that the actual damages to the Holder from the receipt of cash payment on this Note may be difficult to determine and the amount to be so paid by the Borrower represents stipulated damages and not a penalty and is intended to compensate the Holder in part for loss of the opportunity to convert this Note and to earn a return from the sale of shares of Common Stock acquired upon conversion of this Note at a price in excess of the price paid for such shares pursuant to this Note. The Borrower and the Holder hereby agree that such amount of stipulated damages is not plainly disproportionate to the possible loss to the Holder from the receipt of a cash payment without the opportunity to convert this Note into shares of Common Stock.

4.8 Purchase Agreement. The Borrower and the Holder shall be bound by the applicable terms of the Purchase Agreement and the documents entered into in connection herewith and therewith.

4.9 Notice of Corporate Events. Except as otherwise provided below, the Holder of this Note shall have no rights as a Holder of Common Stock unless and only to the extent that it converts this Note into Common Stock. The Borrower shall provide the Holder with prior notification of any meeting of the Borrower's shareholders (and copies of proxy materials and other information sent to shareholders). In the event of any taking by the Borrower of a record of its shareholders for the purpose of determining shareholders who are entitled to receive payment of any dividend or other distribution, any right to subscribe for, purchase or otherwise acquire (including by way of merger, consolidation, reclassification or recapitalization) any share of any class or any other securities or property, or to receive any other right, or for the purpose of determining shareholders who are entitled to vote in connection with any Change in Control or any proposed liquidation, dissolution or winding up of the Borrower, the Borrower shall mail a notice to the Holder, at least twenty (20) days prior to the record date specified therein (or thirty (30) days prior to the consummation of the transaction or event, whichever is earlier), of the date on which any such record is to be taken for the purpose of such dividend, distribution, right or other event, and a brief statement regarding the amount and character of such dividend, distribution, right or other event to the extent known at such time. The Borrower shall make a public announcement of any event requiring notification to the Holder hereunder substantially simultaneously with the notification to the Holder in accordance with the terms of this Section 4.9.

4.10 Remedies. The Borrower acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder, by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Borrower acknowledges that the remedy at law for a breach of its obligations under this Note will be inadequate and agrees, in the event of a breach or threatened breach by the Borrower of the provisions of this Note, that the Holder shall be entitled, in addition to all other available remedies at law or in equity, and in addition to the penalties assessable herein, to an injunction or injunctions restraining, preventing or curing any breach of this Note and to enforce specifically the terms and provisions thereof, without the necessity of showing economic loss and without any bond or other security being required.

4.11 Construction; Headings. This Note shall be deemed to be jointly drafted by the Borrower and all the Holder and shall not be construed against any person as the drafter hereof. The headings of this Note are for convenience of reference and shall not form part of, or affect the interpretation of, this Note.

4.12 Usury. To the extent it may lawfully do so, the Borrower hereby agrees not to insist upon or plead or in any manner whatsoever claim, and will resist any and all efforts to be compelled to take the benefit or advantage of, usury laws wherever enacted, now or at any time hereafter in force, in connection with any action or proceeding that may be brought by the Holder in order to enforce any right or remedy under this Note. Notwithstanding any provision to the contrary contained in this Note, it is expressly agreed and provided that the total liability of the Borrower under this Note for payments which under the applicable law are in the nature of interest shall not exceed the maximum lawful rate authorized under applicable law (the “Maximum Rate”), and, without limiting the foregoing, in no event shall any rate of interest or default interest, or both of them, when aggregated with any other sums which under the applicable law in the nature of interest that the Borrower may be obligated to pay under this Note exceed such Maximum Rate. It is agreed that if the maximum contract rate of interest allowed by applicable law and applicable to this Note is increased or decreased by statute or any official governmental action subsequent to the Issue Date, the new maximum contract rate of interest allowed by law will be the Maximum Rate applicable to this Note from the effective date thereof forward, unless such application is precluded by applicable law. If under any circumstances whatsoever, interest in excess of the Maximum Rate is paid by the Borrower to the Holder with respect to indebtedness evidenced by this the Note, such excess shall be applied by the Holder to the unpaid principal balance of any such indebtedness or be refunded to the Borrower, the manner of handling such excess to be at the Holder’s election.

4.13 Severability. In the event that any provision of this Note is invalid or unenforceable under any applicable statute or rule of law (including any judicial ruling), then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any such provision which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision of this Note.

4.14 Terms of Future Financings. So long as this Note is outstanding, upon any issuance by the Borrower or any of its subsidiaries of any convertible debt or convertible preferred stock, with any term that the Holder reasonably believes is more favorable to the holder of such security or with a term in favor of the holder of such security that the Holder reasonably believes was not similarly provided to the Holder in this Note, then (i) the Borrower shall notify the Holder of such additional or more favorable term within one (1) business day of the issuance and/or amendment (as applicable) of the respective security, and (ii) such term, at Holder’s option, shall become a part of the transaction documents with the Holder (regardless of whether the Borrower complied with the notification provision of this Section 4.14). The types of terms contained in another security that may be more favorable to the holder of such security include, but are not limited to, terms addressing conversion discounts, prepayment rate, conversion lookback periods, interest rates, and original issue discounts. If Holder elects to have the term become a part of the transaction documents with the Holder, then the Borrower shall immediately deliver acknowledgment of such adjustment in form and substance reasonably satisfactory to the Holder (the “Acknowledgment”) within one (1) business day of Borrower’s receipt of request from Holder (the “Adjustment Deadline”), provided that Borrower’s failure to timely provide the Acknowledgment shall not affect the automatic amendments contemplated hereby. For avoidance of any doubt, the foregoing of this Section 4.14 shall not apply to any financings by the Borrower made under its existing Regulation A and S-1 offerings. Nor shall this section apply to any adjustments made to any of the Borrower’s securities issued prior to the date hereof.

4.15 Dispute Resolution. In the case of a dispute as to the determination of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, Issue, Closing or Maturity Date, the closing bid price, or fair market value (as the case may be) or the arithmetic calculation of the Conversion Price or the applicable prepayment amount(s) (as the case may be), the Borrower or the Holder shall submit the disputed determinations or arithmetic calculations via facsimile (i) within one (1) Trading Day after receipt of the applicable notice giving rise to such dispute to the Borrower or the Holder or (ii) if no notice gave rise to such dispute, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Borrower are unable to agree upon such determination or calculation within five (5) Trading Days of such disputed determination or arithmetic calculation (as the case may be) being submitted to the Borrower or the Holder, then the Borrower shall, within three (3) Trading Days, submit (a) the disputed determination of the Conversion Price, the closing bid price, the or fair market value (as the case may be) to an independent, reputable investment bank selected by the Borrower and approved by the Holder or (b) the disputed arithmetic calculation of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, to an independent, outside accountant selected by the Holder that is reasonably acceptable to the Borrower. The Borrower shall cause at its expense the investment bank or the accountant to perform the determinations or calculations and notify the Borrower and the Holder of the results no later than one (1) Trading Day from the time it receives such disputed determinations or calculations. Such investment bank's or accountant's determination or calculation shall be binding upon all parties absent demonstrable error.

IN WITNESS WHEREOF, Borrower has caused this Note to be signed in its name by its duly authorized officer on February 17, 2021.

RESPIRERX PHARMACEUTICALS INC.

By: \_\_\_\_\_  
Name: Jeff Margolis  
Title: Senior Vice President,  
Chief Financial Officer,  
Treasurer and Secretary

EXHIBIT A — NOTICE OF CONVERSION

The undersigned hereby elects to convert \$ principal amount of the Note (defined below) into that number of shares of Common Stock to be issued pursuant to the conversion of the Note (“Common Stock”) as set forth below, of **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (the “Borrower”), according to the conditions of the Convertible Promissory Note of the Borrower dated as of February 17, 2021 (the “Note”), as of the date written below. No fee will be charged to the Holder for any conversion, except for transfer taxes, if any.

Box Checked as to applicable instructions:

[ ] The Borrower shall electronically transmit the Common Stock issuable pursuant to this Notice of Conversion to the account of the undersigned or its nominee with DTC through its Deposit Withdrawal Agent Commission system (“DWAC Transfer”).

Name of DTC Prime Broker:  
Account Number:

[ ] The undersigned hereby requests that the Borrower issue a certificate or certificates for the number of shares of Common Stock set forth below (which numbers are based on the Holder’s calculation attached hereto) in the name(s) specified immediately below or, if additional space is necessary, on an attachment hereto:

**FIRSTFIRE GLOBAL OPPORTUNITIES FUND LLC**  
1040 First Avenue, Suite  
190 New York, NY 10022  
Attn: Eli Fireman  
e-mail: eli@firstfirecapital.com

Date of Conversion:	
Applicable Conversion Price:	\$ _____
Costs Incurred by the Undersigned to Convert the Note into Shares of Common Stock:	\$ _____
Number of Shares of Common Stock to be Issued Pursuant to Conversion of the Note:	_____
Amount of Principal Balance Due remaining Under the Note after this conversion:	_____

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_