

FORM 8-K

Current Report

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

Date of Report (Date of earliest event reported): May 18, 2023

RESPIRERX PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

1-16467
(Commission
File Number)

33-0303583
(I.R.S Employer
Identification No.)

**126 Valley Road, Suite C
Glen Rock, New Jersey
(Address of principal executive offices)**

07452
(Zip Code)

Registrant's telephone number, including area code: (201) 444-4947

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

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

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
N/A	N/A	N/A

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

Emerging growth company ☐

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



Item 1.01 Entry into a Material Definitive Agreement.

Valuation Agreement

On May 11, 2023, effective May 22, 2023, RespireRx Pharmaceuticals Inc. (OTC Pink Market: RSPI) (“RespireRx” and collectively with its subsidiaries, the “Company”) and Viridian Capital Advisors (“VCA”) entered into a letter agreement (“Valuation Agreement”) pursuant to which, VCA will perform the following services (“Services”): (i) review the Company’s intellectual property assets and licensing agreements as they relate to Company’s cannabinoid program, net of any associated liabilities, (ii) review the Company’s financial models and forecasts as they relate to the Company’s cannabinoid program and (iii) prepare the data, analytics and Company valuation report (“Valuation Report”) specifically with respect to the Company’s cannabinoid program. The total fee for the Services is \$45,000. The first draft of the Valuation Report is due within three weeks of the effective date of the Agreement which is the date on which a minimum of a \$35,000 deposit was made. The Valuation Agreement acknowledges that VCA is an independent contractor. The termination date is defined as six weeks from the effective date or the date on which the payment is made for the final Valuation Report. The Valuation Agreement establishes an understanding that VCA may rely entirely on publicly available information and information provided by the Company, its officers, directors and other Company service providers, advisors and agents. The Valuation Agreement contains confidentiality, indemnification and other provisions.

RespireRx entered this Valuation Agreement as part of the process that began with the establishment of the Company’s currently wholly-owned Australian subsidiary, ResolutionRx Ltd, into which the net assets described above and in the Agreement, namely the cannabinoid program are to be contributed.

The above is a summary of what the Company believes are key the provisions of the Valuation Agreement. A copy of the entirety of the Valuation Agreement between Viridian Capital Advisors and RespireRx Pharmaceuticals Inc. dated May 11, 2023 is filed as Exhibit 10.1 to this Current Report on Form 8-K. The above summary is qualified in its entirety by the Current Report of Form 8-K including the copy of the Letter Agreement between Viridian Capital Advisors and RespireRx Pharmaceuticals Inc. dated May 11, 2023 filed as Exhibit 10.1 to such report.

Demand Promissory Note and Warrant Agreements

General

On May 22, 2023, the Company entered into two Demand Promissory Note and Warrant Agreements (“Purchase Agreement(s)”), issued two demand promissory notes (“Demand Promissory Notes”) and two warrants (“Warrants”) associated with the Purchase Agreements. Pursuant to the Purchase Agreements, both RespireRx and the investors (“Investors”) made representations to one another including, but not limited to representations by RespireRx as to its the good standing, the authority and enforceability of the Purchase Agreements, non-contravention, litigation, title, intellectual property, and debt for borrowed money and representations by the Investors including, but not limited to the nature of the arrangement being a binding obligation, that the Investors had been advised that the securities have not been registered under the Securities Act of 1933, as amended (the “Securities Act”) or any state laws, that the Investors understand that there are restrictions on transfer, that the Investors have sufficient knowledge of financial and business matters and that the Investors are accredited investors as defined in Rule 501 of Regulation D under the Securities Act. The forms of the Demand Promissory Notes and the Warrants are Exhibits A and Exhibits B to the respective Purchase Agreements.

The Demand Promissory Notes accrue interest at the rate of 10% per annum based on a 365/366 day year, as applicable. Principal and interest are payable on demand of the lenders individually, (each a “Lender”). Accrued unpaid interest is added to principal at the end of the year that principal is unpaid. Payments are applied first to interest and then principal. To secure its obligations under the Notes and to induce the Lenders to extend the loans (“Loan” or “Loans”) to RespireRx (“Borrower”), the Borrower granted, a security interest in and to, all of such Borrower’s right, title and interest in and to all of the property identified in the Notes, *provided, that* to the extent that any of the Collateral is subject, prior to the date of the Borrower’s Note to a security interest in favor of a third party and the agreement with such third party expressly prohibits any grant of a security interest therein, the Borrower will not be deemed to have a security interest in such Collateral only for so long as such prohibition continues. The terms of the Note(s) are governed by the laws of the State of Delaware, excluding rules related to conflicts of laws.

The Warrant(s) are exercisable in whole or in part at any time from the issuance date (May 22, 2023) to the expiration date which is five years from the initial exercise date. The exercise price is \$0.0015 per share of RespireRx’s common stock, par value \$0.001 (“Common Stock”). The Warrant(s) may be exercised by cashless exercise in accordance with a formula described in the Warrant. The number of shares of Common Stock into which the Warrant(s) may exercise and the exercise price may be adjusted for capital reorganizations or reclassifications such as stock splits, reverse stock splits, stock dividends and similar capital reorganizations or reclassifications. The Warrant(s) and the shares of Common Stock in which the Warrant(s) may be exercised are subject to transfer restrictions. Certain representations were made by the Warrant holders.

Arnold Lippa Family Trust of 2007 and Marc M. Radin

One Purchase Agreement is with the Arnold Lippa Family Trust of 2007 and identified a \$225,000 loan in the form of a Demand Promissory Note and a Warrant exercisable into 75,000,000 shares of RespireRx Common Stock.

Marc M. Radin

The other Purchase Agreement was with Marc M. Radin, the Company’s controller, and identified a \$25,000 loan in the form of a Demand Promissory Note and a Warrant exercisable into 8,333,333 shares of the RespireRx’s Common Stock.

The above are summaries of what the Company believes are key the provisions of the Purchase Agreement(s), the Demand Promissory Note(s) and the Warrant(s). A copy of the entirety of each is filed as Exhibits 10.2-10.7 to this Current Report on Form 8-K. The above summary is qualified in its entirety by this Current Report on Form 8-K including the copy of the Purchase Agreements, the Demand Promissory Notes and the Warrants between the Arnold Lippa Family Trust of 2007 on the one hand and Marc M. Radin on the other hand and RespireRx Pharmaceuticals Inc. dated May 22, 2023 filed as Exhibits 10.2-10.7 to such report.

Item 7.01 Regulation FD Disclosure.

ResolutionRx Letter of Intent with Cantheon Capital

On May 18, 2023, the Company’s wholly-owned Australian unlisted public subsidiary, ResolutionRx Ltd entered into a letter of intent (“Cantheon Letter of Intent” or “Cantheon LOI” or “Cantheon Term Sheet”) with Cantheon Capital (“Cantheon”).

The terms of the Cantheon Letter of Intent are binding, subject only to, (i) satisfactory completion of definitive documents substantially consistent with the terms of the Cantheon Term Sheet, (ii) satisfactory completion of due diligence, (iii) the iNGENu services agreement (described below) is valid and enforceable by all parties and (iv) the development and commercialization rights to the RespireRx cannabinoid program have been sub-licensed, licensed, assigned, transferred or otherwise made available to ResolutionRx.

Under the terms of the Cantheon Term Sheet, Cantheon intends to invest US\$3,125,000 to purchase ResolutionRx Series A Preference Shares (“Series A Shares”), an Australian preferred security. The Certificate of Designation of Series A Shares is Schedule I to Exhibit 99.1 of the RespireRx Current Report on Form 8-K, filed with the US Securities and Exchange Commission on May 5, 2023 (file no. 1-16467). The investment will be made in tranches during the course of the research and development (“R&D”), with each tranche equal to 25% of ResolutionRx approved invoices rendered by ResolutionRx’s contract research organization (“CRO”) for clinical trial services and costs. The use of proceeds from the Cantheon investment will be limited to clinical trials R&D.

The securities offering to Cantheon will be pursuant to a U.S. private placement, exempt from registration under the securities laws, rules and regulations of the United States and the various states of the U.S. and will be undertaken by ResolutionRx with the intention of being part of, but not limited to a larger financing of Series A Preference Shares in Australia and possibly elsewhere. The use of proceeds from other investors will not be limited to costs of clinical trials.

The issuance price on a per Series A Share basis, shall be 90% of the per Series A Share value in the Valuation Report of the cannabinoid program, net of any associated liabilities described above, with a maximum value of US\$25 million, 90% of which would be US\$22.5 million for the purposes of determining the initial price of US\$0.90 per Series A Share and is subject to downward, but not upward adjustment based on the actual value in the Valuation Report.

Cantheon will also receive an origination fee of 1% paid in Series A Shares.

The Series A Shares are convertible. Conversion shall at all times be paid with Ordinary Shares and not in cash. The Series A Shares are subject to a mandatory and automatic conversion the day before an initial public offering (“IPO”), or if an IPO has not occurred within eighteen months of the anniversary date of the services agreement with iNGENu, on the third such anniversary or upon the occurrence of certain corporate events, such as, but not limited to a merger with or acquisition by another entity, sale of control of ResolutionRx or sale of substantially all of the assets of the ResolutonRx.

ResolutionRx represented that it will reasonably endeavour to ensure that the Ordinary Shares will be listed for trading on the Australian Securities Exchange (“ASX”) within eighteen months of the anniversary date of the services agreement with iNGENu. Such listing will be either by IPO, backdoor (shell merger) or direct listing or another mutually agreed method.

In the Cantheon LOI, ResolutionRx represented that it will incur approximately US\$16,530,571 of R&D costs during the performance of R&D which is expected to occur over approximately two and a half years.

A ResolutionRx capitalization table was attached to the Cantheon Term Sheet as Exhibit A.

A press release related to the Cantheon Term Sheet that was jointly released by RespireRx and ResolutionRx on May 24, 2023 is furnished, and not filed as Exhibit 99.1 to this Current Report on Form 8-K.

The above is a summary of what the Company believes are key the provisions of the Cantheon LOI. A copy of the press release related to the Cantheon Letter of Intent is furnished, not filed as Exhibit 99.1 to this Current Report on Form 8-K. A copy of the entirety of the Letter of Intent between ResolutionRx and Cantheon Capital dated May 18, 2023 is furnished, not filed as Exhibit 99.2 to this Current Report on Form 8-K. The above summary is qualified in its entirety by the Current Report of Form 8-K including the copy of the Letter of Intent between ResolutionRx and Cantheon Capital dated May 18, 2023 furnished, not filed as Exhibit 99.2 to such report.

ResolutionRx Ltd Capital Raising Mandate with PrimaryMarkets Pty Limited

On May 22, 2023, ResolutionRx and PrimaryMarkets Pty Limited (“PrimaryMarkets”) entered into a capital raising mandate (“Mandate”) pursuant to which PrimaryMarkets was appointed as non-exclusive advisor to undertake a fund raising for ResolutionRx.

PrimaryMarkets provides a secure and controlled online Platform which has the following features:

- **Dedicated ResolutionRx Capital Raising Page:** ResolutionRx will have a dedicated portal to provide information and data which includes e.g. company information, history, product offerings, announcements, investor presentations, financial reports, research notes and videos etc.
 - **Featured Offering:** PrimaryMarkets will promote ResolutionRx raising as a Featured Listing on PrimaryMarkets Platform.
 - **Marketing Communication:** PrimaryMarkets will push communications out to its 110,000+ global Investor Network via regular eDMs (generally distributed twice weekly) as well as the Company being prominently positioned on the PrimaryMarkets Platform.
 - **Targeted Investors:** PrimaryMarkets can create specific campaigns accessing PrimaryMarkets’ institutional, accredited, wholesale and professional global/local Investor Network.
 - **Dedicated Customer Support:** Online assistance from PrimaryMarkets’ dedicated client managers to help facilitate the capital raising.
-

ResolutionRx will pay to PrimaryMarkets: (i) a one-time fee of AU\$10,000 (approximately US\$6,660, based on an estimate of an exchange rate of US\$1 = AU\$1.50229 on May 22, 2023) plus goods and services tax (“GST”) and (ii) a success fee of 6% plus GST.

The Mandate is for a minimum of three months and thereafter may be terminated by either party upon 7 days written notice.

The provisions of the Mandate are also governed by the Platform Trading Rules as published by PrimaryMarkets on its website. In the event of any inconsistency between the provisions of the Mandate and the Platform Trading Rules, the provisions of the Mandate shall prevail.

The above is a summary of what the Company believes are key the provisions of the Mandate. A copy of the Mandate is furnished, not filed as Exhibit 99.3 to this Current Report on Form 8-K. The above summary is qualified in its entirety by the Current Report on Form 8-K including the copy of the Mandate furnished, not filed as Exhibit 99.3 to such report.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

A list of exhibits that are filed as part of this report is set forth in the Exhibit Index, which follows, and is incorporated herein by reference.

EXHIBIT INDEX

Exhibit Number	Exhibit Description
10.1*	Letter Agreement between Viridian Capital Advisors and RespireRx Pharmaceuticals Inc. dated May 11, 2023
10.2*	RespireRx Demand Promissory Note and Warrant Purchase Agreement Arnold Lippa Family Trust of 2007 dated May 22, 2023
10.3*	RespireRx-Arnold Lippa Family Trust of 2007 Demand Promissory Note dated May 22, 2023
10.4*	RespireRx-Arnold Lippa Family Trust of 2007 Warrant dated May 22, 2023
10.5*	RespireRx Demand Promissory Note and Warrant Purchase Agreement Marc M. Radin PC dated May 22, 2023
10.6*	RespireRx-Marc M. Radin PC Demand Promissory Note dated May 22, 2023
10.7*	RespireRx-Marc M. Radin PC Warrant dated May 22, 2023
99.1**	ResolutionRx and RespireRx joint press release-Cantheon Letter of Intent Press Release
99.2**	ResolutionRx and Cantheon Letter of Intent-Term Sheet dated May 18, 2023 with Exhibit A- Capitalization Table
99.3**	ResolutionRx -Primary Markets Capital Raising Mandate dated 22 May 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.
** Furnished herewith

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: May 24, 2023

RESPIRERX PHARMACEUTICALS INC.
(Registrant)

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

**STRICTLY CONFIDENTIAL**

May 11, 2023

Mr. Jeff Eliot Margolis
Senior Vice President, Chief Financial Officer, Treasurer, Secretary
RespireRx Pharmaceuticals Inc.
126 Valley Road, Suite C
Glen Rock, NJ 07452

Dear Jeff-

This agreement (“Agreement”) supercedes all prior agreements and understandings between the parties. We are pleased to provide RespireRx Pharmaceuticals (“RespireRx” or the “Company”) with this proposal to engage Viridian Capital Advisors (“VCA” or “We”) as a strategic advisor. By signing and agreeing to the description of the services and other terms contained herein, RespireRx and VCA agree that this shall be the Agreement between the parties. We see our assignment being comprised of the following deliverables:

- **Review of the Company’s IP Assets and Licensing Agreements as they relate to the Company’s cannabinoid program, net of any associated liabilities.**
- **Review of the Company’s Financial Models and Forecasts as they relate to the Company’s cannabinoid program.**
- **Preparation of the Data, Analytics, and Company Valuation Report specifically with respect to the Company’s cannabinoid program.**

I. SERVICES**- Review of RespireRx’s IP Assets and Licensing Agreements**

Viridian will conduct a review of the Company’s IP assets and licensing agreements to derive a value that will be used for the final Valuation Analysis.

- Financial Modeling Review

Viridian will analyze and review the Company’s financial forecasts, and suggest any changes or revisions, in order to use these financials as the basis of our DCF analysis, and as a tool for negotiating with capital providers and strategic partners.

New York, N.Y.

www.viridianca.com

Aspen, CO



- Valuation Analysis Report

We will utilize proprietary data from the *Viridian Cannabis Deal Tracker* to provide a comprehensive and empirically derived Valuation Report. The Valuation Report will be used to support the value of the contribution of the net assets that are the subject of the Valuation Report to ResolutionRx Ltd, a currently wholly-owned Australian subsidiary of Respirerx formed on January 11, 2023 and as leverage during negotiations on valuation and structural issues with capital providers and strategic partners. The report will include a range of methodologies in order to drive a tight valuation conclusion:

- Capital Raises by Comparable Companies to RespireRx, using Deal Tracker data
 - For both public and private companies
 - For comparable companies on size and scale
 - For both debt and equity financings
- M&A Activity by, and of, Comparable Companies to RespireRx, using Deal Tracker data
 - For public and private buyers
 - For public and private sellers
 - For comparable companies on size and scale
- Overview of Market Caps, Valuation Multiples and Valuation Metrics for Publicly Traded Companies Comparable to RespireRx
 - For both U.S. and international companies
- Discounted Cash Flow (DCF) Analysis Utilizing the Company's Financial Forecasts
 - Uses current market discount rates and terminal growth rates
- Effect of contributed associated liabilities on the overall valuation

II. Timeline of Deliverables

A first draft of the valuation report and data set will be delivered within three weeks from the Effective Date of the Agreement. A final draft, based upon comments/suggestions from the Company, will be deliverable within one week thereafter.

III. Fees

- A cash fee of \$45,000, of which \$35,000 ("Deposit") will be due and paid on the date of the last signature below and the remaining \$10,000 will be due upon delivery of the final Valuation Report. For clarity, the effective date ("Effective Date") of this agreement shall be the date on which the Deposit is paid.

IV. Independent Contractor Status. VCA is an independent contractor to the Company and shall not have any authority to assume or create any obligations, express or implied, on behalf of the Company and shall have no authority to represent the Company as agent, employee or in any other capacity.

In no manner or form shall the Company be obligated to enter into any sale agreement or act upon VCA advice, and in no manner or form shall the Company be liable to VCA solely on account of rejecting or not entering into any such agreement.



VCA agrees and acknowledges that Company is and shall be solely responsible for any decision to enter into, or reject, any agreement with any customer or any reference(s), recommendation(s) or introduction(s) made by VCA under this Agreement. Company undertakes to conduct any and all inquiries and investigations, as it shall deem fit, prior to entering into any agreement with any entity introduced or suggested to the Company by VCA.

V. Termination of Engagement. This Agreement shall terminate on the earlier of six weeks from the Effective Date or the date on which payment is made by RespireRx for the final Valuation Report. The provisions of Sections VI through XIII of this Agreement, and Annex A hereto, shall survive the termination or expiration of this Agreement.

VI. Reliance Upon and Accuracy of Information. The Company understands, acknowledges, and agrees that VCA may rely entirely upon publicly available information and information provided by the Company and the Company's officers, directors, accountants, counsel and other agents and advisors without independent verification of the accuracy and completeness of such information. If any information provided to VCA becomes inaccurate, incomplete or misleading in any material respect during VCA's engagement hereunder, the Company shall so advise VCA. The Company will continuously advise VCA with respect to any material developments or matters that occur or come to the Company's attention during the term of VCA's engagement hereunder. VCA agrees that no reports or other types of information regarding the Company may be distributed unless such reports and information have been reviewed and approved by the Company.

VII. Confidentiality. No written or oral advice provided by VCA pursuant to this Agreement shall be disclosed, in whole or in part, to any third party (other than the Company's affiliates, directors, officers, shareholders, accountants, counsel, agents and other advisors), or circulated or referred to publicly, without the prior written consent of VCA.

VCA agrees to keep confidential all material nonpublic information provided to it by the Company, except as required by law or as contemplated by the terms of this Agreement. Notwithstanding anything to the contrary herein, VCA may disclose nonpublic information to its affiliates, agents and advisors whenever VCA determines that such disclosure is reasonably necessary to provide the services contemplated hereunder, provided that VCA will notify the Company prior to such disclosure, and provided that VCA shall obtain from such affiliates, agents and advisors appropriate Confidentiality Agreements approved by the Company that such nonpublic information will be kept confidential. VCA shall be responsible for any unauthorized disclosure of any such nonpublic information by any of its affiliates, agents or advisors.



Upon the termination of this Agreement, VCA (including its affiliates, agents and advisors) shall promptly destroy or return to the Company all materials, in whatever medium of expression, containing confidential information or proprietary information of the Company or of any third parties who have disclosed such proprietary or confidential information to the Company. At VCA's discretion, VCA may retain one copy of the Company's proprietary or confidential information to monitor compliance with these confidentiality provisions, pursuant to VCA's document retention policies and to satisfy any regulatory, self-regulatory or similar document retention requirements. In the event VCA is requested or required (by oral questions, interrogatories, request for information, subpoena or similar process) to disclose any of the Company's proprietary or confidential information supplied to VCA, VCA shall provide to the Company, prompt notice of such requests so that the Company may seek an appropriate protective order and/or waive compliance with these confidentiality provisions. If in the absence of a protective order or the receipt of a waiver, upon the advice of counsel of its own choosing, VCA determines that it or its employees, representatives or agents are compelled to disclose any of the Company's proprietary or confidential information under penalty of contempt or liability, VCA or its employees, representative or agents may disclose such material without liability hereunder.

VIII. Compliance with Laws. VCA shall perform all of the services to be provided by VCA hereunder in full compliance with all applicable laws and regulations. Notwithstanding anything to the contrary in this Agreement, VCA shall not perform any service hereunder which would require VCA or any of its employees or agents to register as a broker-dealer under any applicable federal and state securities laws, the rules and regulations thereunder, the rules and regulations of any exchange or quotation service on which the Company's securities are listed and the rules and regulations of the National Financial Industry Regulatory Authority unless and until so registered.

IX. Indemnity. VCA and the Company agree to the provisions with respect to indemnification by the Company of VCA and certain other parties as set forth on Annex A attached hereto.

X. Limitation of Engagement to the Company. The Company acknowledges that VCA has been retained only by the Company, and that the Company's engagement of VCA is not deemed to be on behalf of, and is not intended to confer rights upon, any shareholder, owner or partner of the Company or any other person not a party hereto as against VCA or any of its controlling persons, affiliates, directors, officers, employees or agents. Unless otherwise expressly agreed in writing by VCA, no one other than the Company is authorized to rely upon this engagement or any other statements or conduct of VCA, and no one other than the Company is intended to be a beneficiary of this Agreement. The Company acknowledges that any opinions, recommendations or advice, written or oral, given by VCA to the Company in connection with VCA's engagement are intended solely for the benefit and use of the Company's management and directors, and any such opinions, recommendations or advice shall not confer any rights or remedies upon any other person or be used or relied upon for any other purpose.



XI. Limitation of VCA's Liability to Company. VCA and the Company further agree that neither VCA nor any of its controlling persons, affiliates, directors, officers, employees or agents shall have any liability to the Company, its security holders or creditors, or any person asserting claims on behalf of or in the right of the Company (whether direct or indirect, in contract, tort, for an act of negligence or otherwise) for any losses, fees, damages, liabilities, costs, expenses or equitable relief arising out of or relating to this Agreement or the services to be rendered hereunder, except to the extent that (i) such claim(s) is(are) a direct result of VCA'S gross negligence or willful misconduct, or (ii) it is finally determined (by a court of competent jurisdiction and after exhausting all appeals or in an arbitration conducted in accordance with this Agreement) that such losses, fees, damages, liabilities, costs, expenses or equitable relief resulted (i) solely from the gross negligence or willful misconduct of VCA or (ii) from the breach by VCA of its obligations under Sections VI or Section VII of this Agreement or of its obligations under Annex A. The Company acknowledges that VCA has and will continue to have relationships with other parties in the Company's industry pursuant to which VCA may acquire information or develop relationships that may be of interest to the Company, and that VCA shall have no obligation either to disclose any such information or relationships to the Company or to terminate such relationships.

XII. Governing Law; Injunctive Relief. This Agreement shall be interpreted, and the rights and liabilities determined, in accordance with the laws of the State of New York. Without intending to limit the remedies available to the Company, VCA agrees that damages at law will be an insufficient remedy to the Company in the event that VCA or any of its employees, affiliates, agents or advisors violates any of the terms of Section VI, Section VII or Annex A, and that the Company may apply for and obtain immediate injunctive relief in any court of competent jurisdiction or restrain the breach or threatened breach of, or otherwise to specifically enforce, any of the agreements and covenants of VCA contained in such Sections or Annex.

XIII. Miscellaneous. This Agreement shall not be modified or amended except in writing signed by VCA and the Company. This Agreement shall not be assigned without the prior written consent of VCA and the Company, any such assignment or purported assignment of this Agreement in violation of this Agreement shall be void. This Agreement constitutes the entire agreement of VCA and the Company with respect to the subject matter hereof and supersedes all prior agreements. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, such determination will not affect such provision in any other respect, and the remainder of the Agreement shall remain in full force and effect. In connection with the services it renders pursuant to this Agreement, unless otherwise required to consummate the services or by law, VCA shall not be required to obtain any additional licenses, consent to service of process or otherwise make any further material filing under any applicable state or federal statutes or regulations. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.



In acknowledgment that the foregoing correctly sets forth the understanding reached by VCA and the Company, please sign in the space provided below, whereupon this letter shall constitute a binding Agreement as of the date indicated above.

Sincerely,

Viridian Capital Advisors, LLC

By: /s/ Scott L. Greiper
Name: Mr. Scott Greiper
Title: President
Date: _____

Accepted and Agreed:

RespireRx Pharmaceuticals Inc.

By: /s/ Jeff Eliot Margolis
Name: Mr. Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer,
Secretary
Date: _____

Attachment Follows:

805 Third Avenue

New York, N.Y. 10022

www.viridianca.com



ANNEX A

In connection with VCA's engagement to advise and to assist the Company pursuant to the Agreement dated as of the latest date on the signature page of the Agreement, the Company agrees to indemnify and to hold harmless VCA and each of its officers, directors, employees, affiliates, agents, counsel and other advisors, and each other person or entity who controls any of them (hereinafter collectively referred to as an "Indemnified Party"), to the full extent allowed by law or equity, from and against any and all judgments, losses, claims (whether or not valid), damages, costs, fees, expenses or liabilities, joint or several, to which an Indemnified Party may become subject, related to or arising out of VCA's engagement or performance under the Agreement, the transactions contemplated thereby, the services rendered by VCA under the Agreement, or any actual or threatened claim, litigation, investigation, proceeding or action in any court or before any regulatory, administrative or other body relating to any of the foregoing (hereinafter referred to collectively as a "Claim"), and shall, upon request, reimburse an Indemnified Party for all reasonable and documented legal and other costs, fees and expenses as they are incurred in connection with investigating, preparing or defending a Claim; provided, however, that no such indemnification shall be required with respect to a Claim to the extent that such Claim (i) is a direct result of VCA'S gross negligence or willful misconduct, or (ii) this Agreement has been terminated by the Company for cause as a result of an Indemnified Party's gross negligence or willful misconduct, or (iii) is finally determined by a court of competent jurisdiction (after exhaustion of all appeals) or in an arbitration conducted in accordance with this Agreement to have resulted (i) from the gross negligence or willful misconduct of an Indemnified Party or (ii) from the breach by VCA (or any Indemnified Party) of its obligations under Sections VI or Section VII of the Agreement or of its obligations under Annex A to the Agreement; and, if it is so determined that indemnification is not required, the Indemnified Parties shall immediately repay such amounts previously paid or advanced by the Company.

In the event that the foregoing indemnity is unavailable or insufficient for any reason (other than by reason of the gross negligence or willful misconduct of an Indemnified Party or by reason of a breach by any Indemnified Party of any of its obligations under Sections VI or Section VII of the Agreement or of any of its obligations under Annex A to the Agreement), then the Company shall contribute to any amounts paid or payable by an Indemnified Party in such proportion as appropriately reflects the relative benefits to such Indemnified Party and to the Company in connection with the matters to which the Claim relates. If such allocation is judicially determined to be impermissible, then the Company shall contribute in such proportion as appropriately reflects the relative benefits and relative fault of the Company and such Indemnified Party, as well as any other equitable considerations. The aggregate liability of the Company, VCA and any other Indemnified Party for contribution pursuant to this paragraph in connection with all Claims shall not exceed the amount of fees actually received by VCA under the Agreement.



All amounts due hereunder shall be payable promptly upon request. Upon receipt by an Indemnified Party of actual notice of a Claim as to which indemnification may be sought hereunder, such Indemnified Party shall promptly notify the Company of the nature and basis of the Claim. In addition, an Indemnified Party shall promptly notify the Company after any action is commenced against the Indemnified Party (by way of service with a summons or other legal process) and shall transmit a copy to the business address of the Company. In any event, failure to notify the Company shall not relieve the Company from any liability which the Company may have on account of this indemnity or otherwise, except to the extent that the Company is actually prejudiced thereby. The Company may, and shall, if requested by any Indemnified Party, assume the defense of any Claim against such Indemnified Party in respect of which indemnity may be sought hereunder, including, without limitation, the employment of counsel reasonably satisfactory to such Indemnified Party and the payment of the reasonable fees and expenses of such counsel and necessary experts, in which event, except as provided below, the Company shall not be liable for the fees and expenses of any other counsel retained by such Indemnified Party in connection with such litigation or proceeding. In any such litigation or proceeding the defense of which the Company shall have assumed, any Indemnified Party shall have the right to participate and to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party unless (i) the Company and such Indemnified Party have agreed in writing to the retention of such counsel; or (ii) the named parties to any such litigation or proceeding (including any impleaded parties) include the Company and such Indemnified Party and representation of both parties by the same counsel would, in the opinion of counsel to such Indemnified Party, be inappropriate due to actual or potential conflicts of interests between the Company and such Indemnified Party.

The Company shall not be liable for any settlement of any litigation or proceeding effected without its written consent; however, if settlement occurs with such consent or if there is a final judgment against the Indemnified Party, then the Company agrees to indemnify, pursuant to the terms hereof, against any loss or liability by reason of such settlement or judgment. The Company shall not settle any Claim, action or proceeding where indemnity may be sought hereunder, whether or not any Indemnified Party is an actual or potential party to such Claim, without the written consent of VCA and the Indemnified Party, if other than VCA, t, which consent will not be unreasonably withheld.

The provisions of this Annex A shall be in addition to any liability which the parties my otherwise have to each other; shall not be limited by any rights that the Company, VCA or any other Indemnified Party may otherwise have; shall remain in full force and effect regardless of any termination of VCA's engagement, unless such termination was due to cause based on gross negligence and/or willful misconduct; and shall be binding upon any successors or assigns of VCA and the Company.

DEMAND PROMISSORY NOTE AND WARRANT PURCHASE AGREEMENT

This Demand Promissory Note and Warrant Purchase Agreement, dated as of May 22, 2023 (“**Agreement**”), is entered into by and among RespireRx Pharmaceuticals Inc. (the “**Company**”), a corporation incorporated in the state of Delaware, and the undersigned person or entity listed on the schedule attached hereto as **Schedule I** (the “**Investor**”).

The Company and the Investor hereby agree as follows:

1. *The Demand Promissory Note and Warrant.*

(a) *Authorization of the Issuance of the Demand Promissory Note and Warrant.* The Company has authorized the issuance and sale of a \$225,000.00 Demand Promissory Note (“**Note**”) substantially in the form set out in **Exhibit A** hereto and Warrant (“**Warrant**”) in substantially the form set out in **Exhibit B** hereto and which Warrant represents the right to purchase up to 75,000,000 shares of Common Stock during the Warrant exercise period at the Warrant exercise price per share of Common Stock. References to an “Exhibit” or “Schedule” are references to an Exhibit or Schedule attached to this Agreement unless otherwise specified. References to a “Section” are references to a Section of this Agreement unless otherwise specified.

(b) *Issuance of Note and Warrant.* At the Closing provided for in Section 1(c) on the terms and subject to the conditions hereof, the Company agrees to issue and sell to Investor, and Investor agrees to purchase from the Company, the Note and Warrant in the investment amount (“**Investment Amount**”) set forth on **Schedule I**.

(c) *Closing; Use of Proceeds.* The sale and purchase of the Note and Warrant to be purchased by the Investor shall take place at a closing (“**Closing**”) to be held at such place and time as the Company and the Investor may determine (“**Closing Date**”). At the Closing, the Company will deliver to the Investor the Note and the Warrant to be purchased by Investor dated the date of the Closing and registered in the Investor’s name, against receipt by the Company of Investor’s Investment Amount for the account of the Company by wire transfer of immediately available funds in accordance with the Company’s instructions. The proceeds from the sale of the Note and Warrant shall be used for costs and expenses of the Company and/or its subsidiary, ResolutionRx Ltd in connection with research and development, general and administrative purposes, and working capital.

2. *Representations and Warranties of the Company.* The Company represents and warrants to Investor that, except as set forth in the Company’s periodic financial and other filings with the U.S. Securities and Exchange Commission (“**SEC Documents**”):

(a) *Due Incorporation, Qualification.* The Company (i) is a corporation duly organized, validly existing and in good standing under the laws of its jurisdiction of organization; (ii) has the power and authority to own, lease and operate its properties and carry on its business as now conducted; and (iii) is duly qualified, licensed to do business and in good standing as a foreign corporation in each jurisdiction where such qualification or license is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing could not reasonably be expected to have a material adverse effect on the Company and its subsidiaries taken as a whole.

(b) *Authority; Enforceability.* The execution, delivery and performance by the Company of this Agreement and the Note and Warrant issued hereunder (collectively, the “**Transaction Documents**”) and the consummation of the transactions contemplated hereby and thereby (i) are within the corporate power of the Company and (ii) have been duly authorized by all necessary corporate action on the part of the Company. Each Transaction Document executed by the Company has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the enforcement of creditors’ rights generally and general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(c) *Non-Contravention*. The execution and delivery by the Company of the Transaction Documents executed by the Company and the performance and consummation of the transactions contemplated thereby do not (i) violate the Company's Articles of Incorporation, Certificate of Incorporation, Bylaws or other formation or charter documents, as applicable (as amended, the "**Charter Documents**"), (ii) violate any material judgment, order, writ, decree, statute, rule or regulation applicable to the Company; (iii) result in the breach of any material provision of or in the acceleration of, or entitle any other person to accelerate (whether after the giving of notice or lapse of time or both), any material mortgage, indenture, agreement, instrument or contract to which the Company is a party or by which it is bound; or (iv) result in the creation or imposition of any lien or encumbrance upon any property, asset or revenue of the Company under any material agreement or instrument to which the Company is bound.

(d) *Litigation*. As of the date of the Closing, no actions (including, without limitation, derivative actions), suits, proceedings or investigations are pending or, to the knowledge of the Company, threatened in writing against the Company or the Company's subsidiaries, if any, at law or in equity in any court or before any other governmental authority.

(e) *Title*. The Company and the Company's subsidiaries, if any, own and have good and marketable title in fee simple absolute to, or a valid leasehold interest in, all their respective real properties and good title to their other respective assets and properties. Such assets and properties are subject to no material liens or encumbrances.

(f) *Intellectual Property*. The Company and the Company's subsidiaries, if any, own or possess sufficient legal rights to all patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, processes and other intellectual property rights necessary for its business as now conducted and as proposed to be conducted, without, to the actual knowledge of management, any conflict with, or infringement of, the rights of others. Each employee of the Company has executed, or will execute, a confidential information and invention assignment agreement in favor of the Company. The Company has entered into or intends to enter into, an agreement containing appropriate confidentiality and invention assignment provisions in favor of the Company with each consultant to and vendor of the Company, as appropriate, that has or will have access to the Company's intellectual property.

(g) *Debt for Borrowed Money*. As of the date of this Agreement, the Company does not have any outstanding debt for borrowed money, other than as disclosed in the SEC Documents.

3. Representations and Warranties of Investors. Investor represents and warrants to the Company upon the acquisition of Note and Warrant as follows:

(a) *Binding Obligation*. Investor has full legal capacity, power and authority to execute and deliver this Agreement and to perform its obligations hereunder. This Agreement and the Transaction Documents constitute valid and binding obligations of Investor, enforceable in accordance with their terms, except as limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the enforcement of creditors' rights generally and general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(b) *Securities Law Compliance.* Investor has been advised that the Note and the Warrant and the underlying securities have not been registered under the Securities Act of 1933, as amended (the “**Securities Act**”), or any state securities laws and, therefore, cannot be resold unless they are registered under the Securities Act and applicable state securities laws or unless an exemption from such registration requirements is available. Investor has not been formed solely for the purpose of making this investment and is purchasing the Note and Warrant to be acquired by Investor hereunder for its own account for investment, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof. Investor has no present intention of selling, granting any participation in, or otherwise distributing the same and Investor does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer, grant any participation in or otherwise distribute all or any part of the Note or Warrant. Investor has such knowledge and experience in financial and business matters that Investor is capable of evaluating the merits and risks of such investment, is able to incur a complete loss of the investment without impairing Investor’s financial condition and is able to bear the economic risk of the investment for an indefinite period of time. Investor is an accredited investor as such term is defined in Rule 501 of Regulation D under the Securities Act. Investor further represents that Investor has had the opportunity to ask questions of the Company and received answers concerning the terms and conditions of the sale of the Note and Warrant.

(c) *Source of Funds.* Investor represents that, as to each source of funds (each a “**Source**”) to be used by Investor to pay the purchase price of the Note and Warrant to be purchased by Investor hereunder, the Source does not include assets of any employee benefit plan, other than a plan exempt from the coverage of the Employee Retirement Income Security Act of 1974, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

4. ***Conditions to Closing of the Investor.*** Investor’s obligations at the Closing are subject to the fulfillment, on or prior to the applicable Closing Date, of all of the following conditions:

(a) *Representations and Warranties.* The representations and warranties made by the Company were true and correct when made and are true and correct in all material respects on the Closing Date.

(b) *Governmental Approvals and Filings.* Except for any notices required or permitted to be filed after the Closing Date with certain federal and state securities commissions, the Company shall have obtained all governmental approvals required in connection with the lawful sale and issuance of the Note and Warrant.

(c) *Legal Requirements.* On the date of the Closing, the sale and issuance by the Company, and the purchase by the Investor, of the Note and Warrant shall be legally permitted by all laws and regulations to which Investor or the Company are subject.

(d) *Transaction Documents.* The Company shall have duly executed and delivered to the Investor the following documents: (i) this Agreement and (ii) the Note and Warrant issued hereunder on the date of the applicable Closing.

5. ***Conditions to Obligations of the Company.*** The Company’s obligation to issue and sell the Note and Warrant at the Closing with respect to the Investor, is subject to the fulfillment, on or prior to the applicable Closing Date, of all of the following conditions:

(a) *Representations and Warranties.* The representations and warranties made by the Investor in **Section 3** hereof shall be true and correct when made and shall be true and correct on the Closing Date.

(b) *Legal Requirements.* On the date of the Closing, the sale and issuance by the Company, and the purchase by the Investor, of the Note and Warrant shall be legally permitted by all laws and regulations to which Investor or the Company are subject.

(c) *Transaction Documents.* With respect to the obligation to sell and issue the Note and Warrant to Investor, Investor shall have duly executed and delivered to the Company (i) this Agreement and (ii) an acceptance by Investor of the Note and Warrant issued hereunder to Investor on the date of the Closing.

6. Disclosures.

(a) *No Broker's or Finder's Fees.* There are no brokers or finders owed fees by the Company with respect to the transaction contemplated in this Agreement or the Transaction Documents.

(b) *Arm's Length Negotiation.* The Company has not set the purchase price through an arms-length negotiation with Investor or Investor representative. The Company believes the price at which the Note and Warrant are being offered appropriately reflects economic realities under the Company's current circumstances. However, there can be no assurances that the Note and Warrant are not worth substantially less than the price at which they are being sold.

(c) *Legal Counsel.* Investor hereby represents and warrants that it has consulted with legal counsel of its choosing or has had sufficient opportunity to consult with legal counsel of its choosing, in respect of the terms and conditions of this Agreement and the Note and Warrant.

7. Miscellaneous.

(a) *Waivers; Amendments.* Except as otherwise expressly provided in the Note (with respect to only the Note), any provision of this Agreement and the Note may be amended, waived or modified only upon the written consent of the Company and Investor. Furthermore, except as otherwise expressly provided in the Warrant (with respect to only the Warrant), any provision of this Agreement and the Warrant may be amended, waived or modified only upon the written consent of the Company and Investor.

(b) *Nature of Investment.* For the avoidance of doubt, the parties hereto acknowledge and agree that the payment of the Investment Amount to the Company by the Investor in respect of the Note (but not in respect of any Warrant) will be deemed to be a debt investment in the Note issued by the Company.

(c) *Governing Law.* This Agreement and all actions arising out of or in connection with this Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law provisions of the State of New York or of any other state.

(d) *Survival.* The representations, warranties, covenants and agreements made herein shall survive the execution and delivery of this Agreement.

(e) *Successors and Assigns.* Subject to the restrictions on transfer described in **Section 6(f)** below, the rights and obligations of the Company and the Investor shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

(f) *Assignment.* The rights, interests or obligations hereunder and under the Warrant may not be assigned, by operation of law or otherwise, in whole or in part, by the Company without the prior written consent of the Investor. Unless provided for otherwise in this Agreement or the Transaction Documents, the rights, interests or obligations hereunder and under the Warrant may not be assigned by Investor without the prior written consent of the Company.

(g) *Entire Agreement.* This Agreement together with the other Transaction Documents constitute and contain the entire agreement among the Company and Investor and supersede any and all prior agreements, negotiations, correspondence, understandings and communications among the parties, whether written or oral, respecting the subject matter hereof.

(h) *Notices.* All notices, demands, consents, or other communications hereunder shall in writing and faxed, mailed or delivered to each party as follows: (i) if to Investor, at such Investor’s address or facsimile number set forth in **Schedule I**, or at such other address as Investor shall have furnished the Company in writing in accordance with this paragraph, or (ii) if to the Company, at such address or fax number set forth on the signature pages hereto, or at such other address or facsimile number as the Company shall have furnished to Investor in writing in accordance with this paragraph. All such communications will be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one business day after being delivered by facsimile (with receipt of appropriate confirmation) or email (with receipt of appropriate confirmation, or if followed within one day by another acceptable means of notice), (iv) one business day after being deposited with an overnight courier service of recognized standing or (v) four days after being deposited in the U.S. mail, first class with postage prepaid.

(i) *Expenses.* Each of the Company and Investor will bear their own respective expenses associated with the negotiation, execution and delivery of this Agreement and the Note and Warrant.

(j) *Only Company Liable.* In no event shall any stockholder, officer, director or employee of the Company be liable for any amounts due or payable pursuant to this Agreement or any Transaction Document.

(k) *Severability.* If any provision of this Agreement shall be judicially determined to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(l) *Headings.* Headings used in this Agreement have been included for convenience and ease of reference only, and will not in any manner influence the construction or interpretation of any provision of this Agreement.

(m) *Counterparts.* This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Facsimile copies of signed signature pages will be deemed binding originals.

Signature page follows

The parties have caused this Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

COMPANY:

RESPIRERX PHARMACEUTICALS INC.

a Delaware corporation

By: */s/ Jeff Eliot Margolis*

Name: Jeff Eliot Margolis

Title: Senior Vice President, Chief Financial Officer, Treasurer & Secretary

Address for notices:

RespireRx Pharmaceuticals Inc.

Attention: Jeff Eliot Margolis

Senior Vice President, Chief Financial Officer, Treasurer & Secretary

126 Valley Road, Suite C

Glen Rock, NJ 07452

(phone): 917-834-7206

(fax): 415-887-7814

INVESTOR:

ARNOLD LIPPA FAMILY TRUST OF 2007

By: /s/ Scott Lavin

(signature)

Print Name: Scott Lavin

Print Title: Trustee

Schedule I and Exhibit A and Exhibit B follow:

SCHEDULE I

INVESTOR:

ARNOLD LIPPA FAMILY TRUST OF 2007

By: /s/ Scott Lavin (signature)

Print Name: Scott Lavin

Print Title: Trustee

Address line 1: 325 Greenway Road

Address line 2: _____

City, State, Zip, other postal code as applicable, Country: Ridgewood, NJ 07450

Phone: _____ [***] _____

Email: [***]

Fax: [***]

Social Security Number or Tax Identification Number as appropriate: [***]

Investment Amount in Dollars: \$225,000.00

Principal Amount of Demand Promissory Note Purchased
(same as investment amount): \$225,000.00

Number of Shares of Common Stock underlying Warrant
(Principal Amount of Note divided by \$0.003): 75,000,000

EXHIBIT A

FORM OF DEMAND PROMISSORY NOTE

[see attached]

DEMAND PROMISSORY NOTE

\$225,000.00

May 22, 2023

FOR VALUE RECEIVED, **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (the “**Borrower**”), with a mailing address at 126 Valley Road, Suite C, Glen Rock, New Jersey 07452, hereby promises to pay *on demand* and to the order of the Arnold Lippa Family Trust of 2007 (the “**Lender**”), with an address of 325 Greenway Road, Ridgewood, NJ 07450, or at such other place as the holder hereof may designate in writing, the principal sum of two hundred twenty-five thousand dollars and no cents (\$225,000.00), together with interest thereon at the interest rate as set forth herein (the “**Loan**”). The Lender’s books and records as to amounts due under this Note shall be conclusive absent manifest error.

Principal and Interest. Principal and accrued interest thereon shall be immediately due and payable upon demand of the Lender. Interest shall accrue on the outstanding principal amount at a rate equal to 10% per annum. Interest shall be calculated on the basis of the actual number of days elapsed and a year of 365/366 days, as applicable. Any accrued but unpaid interest shall be added to the principal balance on the last day of each year that the principal is outstanding and unpaid.

Payments; Prepayments.

(a) Payment, when paid, shall be applied first to the payment of all interest accrued and unpaid on this Note and then to payment on account of the principal hereof.

(b) This Note may be prepaid in whole or in part at any time, without premium or penalty. Each prepayment must be accompanied by a written notice of such prepayment indicating the amount of such payment to be applied as a prepayment of principal.

Default. If the Borrower fails to make any payment when the same shall become due and payable, then the holder of this Note may declare the unpaid principal balance under this Note to be immediately due and payable and thereupon such balance shall become due and payable without presentation, protest or further demand or notice of any kind, all of which are hereby expressly waived, and the holder of this Note shall be entitled to receive, to the extent lawful, all costs, including reasonable attorney’s fees and expenses, for the collection of such amounts.

Time is of the Essence. *Time is of the essence with respect to each and every term and provision of this Note.*

Security Agreement.

(a) To secure its obligations under this Note and to induce the Lender to extend the Loan to the Borrower, the Borrower hereby grants, conveys and assigns to the Lender a security interest in and to, all of such Borrower’s right, title and interest in and to all of the following property, in all its forms, in each case whether now or hereafter existing, whether now owned or hereafter acquired, created or arising, and wherever located (collectively, but without duplication, the “**Collateral**”): all Equipment, Inventory and other Goods, Accounts, General Intangibles (including, without limitation, all of the Borrower’s patents and patent applications, trademarks and trademark applications, registered copyrights, domain names, and all licenses for the use of any patents, trademarks, copyrights and domain names of the Borrower), Fixtures, Documents, Letter-of-Credit Rights and Chattel Paper, Deposit Accounts, Instruments and Investment Property including equity interests in other companies, Commercial Tort Claims, Supporting Obligations, and all Proceeds of any and all of the foregoing (as all such capitalized terms used in this paragraph are as defined in the Uniform Commercial Code in effect in the State of Delaware); *provided, that* to the extent that any of the foregoing Collateral is subject, prior to the date hereof, to a security interest in favor of a third party and the agreement with such third party expressly prohibits any grant of a security interest therein, the Borrower will not be deemed to have a security interest in such Collateral only for so long as such prohibition continues. This Note shall constitute a security agreement for the purpose of granting to the Lender a security interest in the Collateral. The Borrower makes no representation to the Lender as to value of any Collateral or the priority of any lien on the Collateral which is granted hereby by the Borrower to the Lender in relation to any other liens on the Collateral which may exist of record as of the date hereof. By its acceptance of this Note, the Lender agrees hereby that to the extent that a prior security interest has been granted in and a lien exists on any of the Collateral pursuant to any other security agreement and perfected lien, the Lender shall have a lien which is subordinate to such prior lien of record.

(b) The Borrower hereby authorizes the Lender and appoints the Lender as its attorney-in-fact, to file in such office or offices as the Lender deems necessary or desirable, such financing and continuation statements and amendments and supplements thereto, and such other documents as the Lender may require to perfect, preserve and protect the security interests granted herein.

(c) The Borrower agrees that from time to time, at the expense of the Borrower, it will promptly execute and deliver all such further instruments and documents, and take all such further action as may be necessary or desirable, or as the Lender may reasonably request, in order to perfect and protect any security interest granted or purported to be granted hereby or to enable the Lender to exercise and enforce its rights and remedies hereunder and with respect to any Collateral or to otherwise carry out the purposes of this security agreement.

(d) The Borrower will, at its sole cost and expense, preserve and defend the Collateral, keep the Collateral in good condition at all times, and preserve the Collateral free and clear of all other liens and encumbrances, except liens existing prior to the effective date of this Loan or which the Lender has consented to and for taxes not yet due and payable. However, the foregoing will not prevent the Borrower from terminating its interest in and/or abandoning any Collateral if, in its reasonable discretion, such Collateral has no further value to the Borrower.

(e) The Borrower will not sell any Collateral outside the ordinary course of business without the prior written consent of the Lender, which consent shall not be unreasonably withheld, delayed or conditioned.

(f) The Borrower will keep itself and the Collateral insured against all hazards in such amounts as the Lender may reasonably require.

(g) Upon the occurrence and during the continuation of a default hereunder, the Lender may exercise, in addition to any other rights and remedies provided herein, under other contracts and under law, all the rights and remedies of a secured party under the Uniform Commercial Code.

Waiver. The Borrower hereby waives, unless otherwise provided for in this Note, demand, notice of presentment, protest, notice of dishonor and protest, rights or extension and any defense by reason of extension of time or other indulgences granted by the Lender.

Notices. Any notice, presentation or demand to or upon the Borrower in respect of this Note may be given or made by being mailed by registered or certified mail addressed to the Borrower at the address first written above or, if any other address shall at any time be designated for this purpose by the Borrower in writing to the holder of this Note at the time of such notice, to such other address. Notice shall be deemed received three (3) days after posting the same. Notice may also be given by hand-delivery, by facsimile transmission with confirmation of receipt or by email, effective on the date of the email, if a confirmation of email receipt is received by the Lender or if a copy has been transmitted by any other approved method.

Costs and Expenses.

(a) If the Lender retains the services of legal counsel in order to enforce any remedy available to the Lender under any document or instrument evidencing or securing the Loan, attorney's fees which are reasonable and actually incurred by the Lender shall be payable on demand by the Borrower to the Lender, and the Borrower shall also pay on demand the cost of any and all other costs reasonably incurred by the Lender in connection with proceedings to recover any sums due hereunder. Any such amounts not paid promptly on demand shall be added to the outstanding principal balance of this Note and shall bear interest at the stated interest rate of this Note until paid in full.

(b) Nothing contained herein shall limit or impair the obligation of the Borrower to pay any and all costs and expenses for which the Borrower is otherwise liable to the Lender as provided by law.

Miscellaneous.

(a) Any provision hereof found to be illegal, invalid or unenforceable for any reason whatsoever shall not affect the validity, legality or enforceability of the remaining provisions hereof.

(b) If the effective interest rate on this Note would otherwise violate any applicable usury law, then the interest rate shall be reduced to the maximum permissible rate retroactively to the original date of this Note, and any payment received by the holder in excess of the maximum permissible rate shall be treated as a prepayment of the principal of this Note.

(c) This Note shall inure to the benefit of the Lender and its heirs, estate, personal representatives and legal guardians, endorsees and assigns. This Note may not be assigned by either the Borrower or the Lender without the prior written consent of the other party.

(d) The descriptive headings of this Note are inserted for convenience only and shall not affect the meaning or construction of any of the provisions of this Note.

(e) The terms of this Note may be amended and any rights of the Lender hereunder may be waived only if such amendment or waiver is in writing and is signed by the Lender and the Borrower.

Governing Law. The validity, construction and enforceability of this Note shall be construed in accordance with and governed by the laws of the State of Delaware, excluding rules relating to conflicts of law.

This Note has been duly executed by the Borrower and constitutes a legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms. All covenants and promises in this Note shall bind the successors and permitted assigns of the Borrower.

[Signature Page Follows]

IN WITNESS WHEREOF, the Borrower has duly executed this Demand Promissory Note effective as of the day and year first above written.

RESPIRERX PHARMACEUTICALS INC.

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

EXHIBIT B

FORM OF WARRANT

[see attached]

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAW, AND NO INTEREST HEREIN OR THEREIN MAY BE SOLD, DISTRIBUTED, ASSIGNED, OFFERED, PLEDGED OR OTHERWISE TRANSFERRED UNLESS (A) THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT AND APPLICABLE STATE SECURITIES LAWS COVERING ANY SUCH TRANSACTION, (B) THE COMPANY RECEIVES AN OPINION OF COUNSEL FOR THE HOLDER OF SUCH SECURITIES (CONCURRED IN BY COUNSEL FOR THE COMPANY) THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION, OR (C) THE COMPANY OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE COMMON STOCK

RESPIRERX PHARMACEUTICALS INC.

Warrant Number: DPN-001

Initial Exercise Date: May 22, 2023

THIS COMMON STOCK PURCHASE WARRANT (the “Warrant”) certifies that, for value received, the Arnold Lippa Family Trust of 2007 (the “Holder”) is entitled, upon the terms and conditions hereof, and subject to the limitations on exercise hereinafter set forth, at any time on or after the date hereof (the “Initial Exercise Date”) and on or prior to the 5:00 p.m. New York time, on the date that is 5 years from the initial exercise date (the “Termination Date”) but not thereafter, to subscribe for and purchase from RespireRx Pharmaceuticals Inc., up to 75,000,000 shares (as subject to adjustment hereunder, the “Warrant Shares”) of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Demand Promissory Note and Warrant Purchase Agreement dated on May 22, 2023 (the “SPA”), among the Company and the Investor. This is the warrant referred to in Section 1.(a) of the SPA.

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on any Business Day on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy of the Notice of Exercise form annexed hereto. Within three (3) Business Days, as defined below, following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer in immediately available funds or cashier’s check drawn on a United States bank in immediately available funds unless the exercise is a cashless exercise, in which case no funds would due and payable. A “Business Day” means any day other than a Saturday or Sunday or any day that national commercial banks in New York City, New York are authorized or required to close or any day that the NASDAQ stock markets or any other nationally recognized stock markets are closed. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Business Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Company, either directly or through its representative, shall maintain or cause to be maintained, records showing the number of Warrant Shares purchased and the date of such purchases, which records shall be deemed to be accurate absent manifest error. The Company shall deliver any objection to any Notice of Exercise Form within two (2) Business Days of actual receipt of such notice. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares available for purchase hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$0.0015 per share, subject to adjustment hereunder (the “Exercise Price”).

c) Cashless Exercise. This Warrant may be exercised at any time otherwise permitted by means of a “cashless exercise” in which the Holder shall be entitled to receive a certificate for the number of Warrant Shares equal to the quotient obtained by the following formula:

$$\frac{(A-B)*(X)}{(A)}$$

Where:

(A) = the Closing Price on the Trading Day immediately preceding the date of such election (“Trading Day” means any Business Day, or, if the Common Stock of the Company is traded on an exchange, the OTC Pink Market or any other OTC market or other quotation system, then any Business Day on which such exchange, the OTC Pink Market or any OTC market or quotation system is open for trading the Common Stock of the Company);

(B) = the Exercise Price of this Warrant, as adjusted; and

(X) = the number of Warrant Shares issuable upon exercise of this Warrant in accordance with the terms of this Warrant by means of a cash exercise rather than a cashless exercise.

As used herein, “Closing Price”, shall mean the first of the following clauses that applies: (1) if, at the time of any such calculation, the Common Stock is listed or quoted on the NYSE MKT, or the New York Stock Exchange, or the NASDAQ Global Market, the NASDAQ Global Select Market, the NASDAQ Capital Market or any other U.S. national exchange, the Closing Price shall be the closing or last sale price reported for the last business day immediately preceding the date of any such calculation; (2) if, at the time of any such calculation, the Common Stock is quoted on the OTC Pink Market or any other OTC market published by the National Quotation Bureau Inc. or a similar agency or organization succeeding to its function or reporting prices, the Closing Price shall be the average of the closing prices reported for the last five (5) days during which the Common Stock actually traded and for which a closing price is available immediately preceding the date of any such calculation, or (3) in all other cases, the Closing Price of a share of Common Stock shall be the price determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company.

d) Mechanics of Exercise.

i. Delivery of Certificates Upon Exercise. Certificates for shares issuable upon the exercise hereof shall be transmitted by the transfer agent of the Company to the Holder by crediting the account of the Holder’s broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission (“DWAC”) system if the Company is a participant in such system and such shares are eligible for legend removal or such other book-entry or electronic delivery system agreed by Holder and the Company, or otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise on the date that is no more than five (5) Business Days after the latest of (A) the delivery to the Company of the Notice of Exercise, (B) surrender of this Warrant (if required), and (C) any required payment of the aggregate Exercise Price as set forth above (such date, the “Warrant Share Delivery Date”). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the latter of the date the Warrant has been exercised and any required payment to the Company of the Exercise Price has been made in good funds by either certified check, wire transfer or other similar payment method and all taxes required to be paid by the Holder as set forth in Section 2(a) above, if any, pursuant to Section 2(d)(v) prior to the issuance of such shares, having been paid.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to transmit or to cause the transfer agent of the Company to transmit to the Holder a certificate or the certificates representing the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

v. Charges, Taxes and Expenses. Issuance of certificates for Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event certificates for Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto (the "Assignment Form") duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

vi. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

vii. Acquisitions. If at any time while this Warrant is outstanding there is an Acquisition (as defined below), then the Holder shall receive from any surviving entity or successor to the Company, in exchange for this Warrant, a new warrant in the surviving entity or successor to the Company substantially in the form of this Warrant and with an exercise price adjusted to reflect the Common Stock equivalent price offered in the Acquisition. An "Acquisition" shall mean the closing of a merger, share exchange, consolidation, acquisition of all or substantially all of the assets or stock, reorganization or liquidation of the Company that results in the stockholders of the Company immediately prior to such transaction owning less than 50% of the voting capital stock of the Company (or its successor or parent corporation) immediately after the transaction or, in the case of a sale of assets or liquidation, the Company owning after the transaction less than substantially all of the assets owned by the Company prior to the transaction (other than an issuance of equity securities for the primary purpose of raising capital) or any other event that constitutes a "Capital Change" under the Company's Second Restated Certificate of Incorporation, as it may be amended, restated or otherwise modified from time to time. The Holder shall execute all documentation required to be executed by the Company or the acquirer or successor of the Company in connection with the Acquisition, including, without limitation, escrow, indemnification and other similar agreements. Subject to and to the extent permitted by applicable law, the Company will endeavor to notify the Holder of any proposed Acquisition at least 30 days prior to the date of any Acquisition (or such shorter period as reasonably practicable under the circumstances); provided that the failure to so notify the Holder shall not in any way impair the Acquisition.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant and which shall not include any dividends paid-in-kind in respect to any series of convertible preferred stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

b) Calculations. All calculations under this Section 3 shall be made to the nearest $1/100^{\text{th}}$ of a cent or the nearest $1/100^{\text{th}}$ of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

c) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to this Section 3, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (B) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, or (C) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, any of the events in Section 3.(c)ii (A), (B) or (C) being an “Event”, then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register of the Company, at least ten (10) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such Event is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such Event; provided that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the Event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with an Assignment Form duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall, either directly or through its representative, record or cause to be recorded, this Warrant, upon records to be maintained by the Company for that purpose (the “Warrant Register”), in the name of the record Holder hereof from time to time, which Warrant Register shall be deemed to be accurate absent manifest error. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant satisfy any other reasonable conditions established by the Company, including without limitation, a legal opinion reasonably acceptable to the Company with respect to such transfer.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act. The Holder acknowledges that the Warrant Shares will not be registered under the Securities Act of 1933, as amended, or any applicable statute or foreign securities law, and will therefore not be freely transferable.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i).

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the trading market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, 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 Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or reasonably appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or reasonably appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. This Warrant is a contract between the Company and the Holder and its terms shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed in the State of New York, without giving effect to any choice or conflict of law provision or rule of that or any other jurisdiction. The Company and each Holder irrevocably consent to the jurisdiction of the United States federal courts and the state courts located in New York City, in any suit or proceeding based on or arising under this Warrant and irrevocably agree that all claims in respect of such suit or proceeding may be determined in such courts. The Company and each Holder irrevocably waives the defense of an inconvenient forum to the maintenance of such suit or proceeding in such forum. The Company further agrees that service of process upon the Company mailed by first class mail shall be deemed in every respect effective service of process upon the Company in any such suit or proceeding. Nothing herein shall affect the right of any Holder to serve process in any other manner permitted by law. The Company agrees that a final non-appealable judgment in any such suit or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on such judgment or in any other lawful manner.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be deemed delivered the day after the date sent if sent by overnight courier, the same day sent if sent by facsimile transmission with confirmation of receipt by the Holder or three (3) days after deposit with the US Postal Service if sent via certified mail or first class mail if sent to the Holder at the address on the last date on which Holder communicated its contact information to the Company, or if sent by email effective on the date of the email, if a confirmation of email receipt is received by the Holder or if by the next Business Day, copy has been transmitted by any other approved method based.

i) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

j) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. Such successors or permitted assigns of the Holder shall be deemed to be the Holder for all purposes hereunder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares. Nothing herein, express or implied, is intended to or shall confer upon any other person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

k) Entire Agreement. This Warrant constitutes the sole and entire agreement of the parties to this Warrant with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

o) Waiver of Jury Trial. Each party acknowledges and agrees that any controversy which may arise under this Warrant is likely to involve complicated and difficult issues and, therefore, each such party irrevocably and unconditionally waives any right it may have to a trial by jury in respect of any legal action arising out of or relating to this Warrant or the transactions contemplated hereby.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the 22nd day of May, 2023.

RESPIRERX PHARMACEUTICALS INC.

By _____
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer,
Treasurer & Secretary

NOTICE OF EXERCISE

TO: RESPIRERX PHARMACEUTICALS, INC.

(1) The undersigned, pursuant to the provisions set forth in the attached Warrant No. _____, hereby irrevocably elects to purchase *(check applicable box)*:

- ☐ _____ shares of the Common Stock of RespireRx Pharmaceuticals, Inc. covered by such Warrant; or
- ☐ the maximum number of shares of Common Stock covered by such Warrant pursuant to the cashless exercise procedure set forth in Section 2(c), calculated as follows:
(insert calculation)

(2) The undersigned herewith makes payment of the full purchase price for such shares at the price per share provided for in such Warrant. Such payment takes the form of *(check applicable box or boxes)*:

- ☐ \$ _____ in lawful money of the United States; and/or
- ☐ if the provisions of Section 2(c) of this Warrant are in effect, the cancellation of such portion of the attached Warrant as is exercisable for a total of _____ Warrant Shares (using a Closing Price of \$ _____ per share for purposes of this calculation); and/or

(3) Please issue a certificate or certificates representing said Warrant Shares in the name of the undersigned or in such other name as is specified below:

(please print or type name and address)

(please insert social security or other identifying number)

The Warrant Shares shall be delivered to the following:

(please print or type name and address)

and if such number of shares of Common Stock shall not be all the shares evidenced by this Warrant Certificate, that a new Warrant for the balance of such shares be registered in the name of, and delivered to, Holder.

The Warrant Shares shall be delivered to the following DWAC Account Number or by physical delivery of a certificate to:

(4) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity:

Name of Authorized Signatory:

Title of Authorized Signatory:

Date: _____

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to exercise the warrant.)

FOR VALUE RECEIVED, [] all of or [] shares of the foregoing Warrant and all rights evidenced thereby are hereby assigned to

whose address is
.

Dated: ,

Holder’s Signature:

Holder’s Address:

Signature Guaranteed:

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

DEMAND PROMISSORY NOTE

\$225,000.00

May 22, 2023

FOR VALUE RECEIVED, **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (the “**Borrower**”), with a mailing address at 126 Valley Road, Suite C, Glen Rock, New Jersey 07452, hereby promises to pay *on demand* and to the order of the Arnold Lippa Family Trust of 2007 (the “**Lender**”), with an address of 325 Greenway Road, Ridgewood, NJ 07450, or at such other place as the holder hereof may designate in writing, the principal sum of two hundred twenty-five thousand dollars and no cents (\$225,000.00), together with interest thereon at the interest rate as set forth herein (the “**Loan**”). The Lender’s books and records as to amounts due under this Note shall be conclusive absent manifest error.

Principal and Interest. Principal and accrued interest thereon shall be immediately due and payable upon demand of the Lender. Interest shall accrue on the outstanding principal amount at a rate equal to 10% per annum. Interest shall be calculated on the basis of the actual number of days elapsed and a year of 365/366 days, as applicable. Any accrued but unpaid interest shall be added to the principal balance on the last day of each year that the principal is outstanding and unpaid.

Payments; Prepayments.

(a) Payment, when paid, shall be applied first to the payment of all interest accrued and unpaid on this Note and then to payment on account of the principal hereof.

(b) This Note may be prepaid in whole or in part at any time, without premium or penalty. Each prepayment must be accompanied by a written notice of such prepayment indicating the amount of such payment to be applied as a prepayment of principal.

Default. If the Borrower fails to make any payment when the same shall become due and payable, then the holder of this Note may declare the unpaid principal balance under this Note to be immediately due and payable and thereupon such balance shall become due and payable without presentation, protest or further demand or notice of any kind, all of which are hereby expressly waived, and the holder of this Note shall be entitled to receive, to the extent lawful, all costs, including reasonable attorney’s fees and expenses, for the collection of such amounts.

Time is of the Essence. *Time is of the essence with respect to each and every term and provision of this Note.*

Security Agreement.

(a) To secure its obligations under this Note and to induce the Lender to extend the Loan to the Borrower, the Borrower hereby grants, conveys and assigns to the Lender a security interest in and to, all of such Borrower’s right, title and interest in and to all of the following property, in all its forms, in each case whether now or hereafter existing, whether now owned or hereafter acquired, created or arising, and wherever located (collectively, but without duplication, the “**Collateral**”): all Equipment, Inventory and other Goods, Accounts, General Intangibles (including, without limitation, all of the Borrower’s patents and patent applications, trademarks and trademark applications, registered copyrights, domain names, and all licenses for the use of any patents, trademarks, copyrights and domain names of the Borrower), Fixtures, Documents, Letter-of-Credit Rights and Chattel Paper, Deposit Accounts, Instruments and Investment Property including equity interests in other companies, Commercial Tort Claims, Supporting Obligations, and all Proceeds of any and all of the foregoing (as all such capitalized terms used in this paragraph are as defined in the Uniform Commercial Code in effect in the State of Delaware); *provided, that* to the extent that any of the foregoing Collateral is subject, prior to the date hereof, to a security interest in favor of a third party and the agreement with such third party expressly prohibits any grant of a security interest therein, the Borrower will not be deemed to have a security interest in such Collateral only for so long as such prohibition continues. This Note shall constitute a security agreement for the purpose of granting to the Lender a security interest in the Collateral. The Borrower makes no representation to the Lender as to value of any Collateral or the priority of any lien on the Collateral which is granted hereby by the Borrower to the Lender in relation to any other liens on the Collateral which may exist of record as of the date hereof. By its acceptance of this Note, the Lender agrees hereby that to the extent that a prior security interest has been granted in and a lien exists on any of the Collateral pursuant to any other security agreement and perfected lien, the Lender shall have a lien which is subordinate to such prior lien of record.

(b) The Borrower hereby authorizes the Lender and appoints the Lender as its attorney-in-fact, to file in such office or offices as the Lender deems necessary or desirable, such financing and continuation statements and amendments and supplements thereto, and such other documents as the Lender may require to perfect, preserve and protect the security interests granted herein.

(c) The Borrower agrees that from time to time, at the expense of the Borrower, it will promptly execute and deliver all such further instruments and documents, and take all such further action as may be necessary or desirable, or as the Lender may reasonably request, in order to perfect and protect any security interest granted or purported to be granted hereby or to enable the Lender to exercise and enforce its rights and remedies hereunder and with respect to any Collateral or to otherwise carry out the purposes of this security agreement.

(d) The Borrower will, at its sole cost and expense, preserve and defend the Collateral, keep the Collateral in good condition at all times, and preserve the Collateral free and clear of all other liens and encumbrances, except liens existing prior to the effective date of this Loan or which the Lender has consented to and for taxes not yet due and payable. However, the foregoing will not prevent the Borrower from terminating its interest in and/or abandoning any Collateral if, in its reasonable discretion, such Collateral has no further value to the Borrower.

(e) The Borrower will not sell any Collateral outside the ordinary course of business without the prior written consent of the Lender, which consent shall not be unreasonably withheld, delayed or conditioned.

(f) The Borrower will keep itself and the Collateral insured against all hazards in such amounts as the Lender may reasonably require.

(g) Upon the occurrence and during the continuation of a default hereunder, the Lender may exercise, in addition to any other rights and remedies provided herein, under other contracts and under law, all the rights and remedies of a secured party under the Uniform Commercial Code.

Waiver. The Borrower hereby waives, unless otherwise provided for in this Note, demand, notice of presentment, protest, notice of dishonor and protest, rights of extension and any defense by reason of extension of time or other indulgences granted by the Lender.

Notices. Any notice, presentation or demand to or upon the Borrower in respect of this Note may be given or made by being mailed by registered or certified mail addressed to the Borrower at the address first written above or, if any other address shall at any time be designated for this purpose by the Borrower in writing to the holder of this Note at the time of such notice, to such other address. Notice shall be deemed received three (3) days after posting the same. Notice may also be given by hand-delivery, by facsimile transmission with confirmation of receipt or by email, effective on the date of the email, if a confirmation of email receipt is received by the Lender or if a copy has been transmitted by any other approved method.

Costs and Expenses.

(a) If the Lender retains the services of legal counsel in order to enforce any remedy available to the Lender under any document or instrument evidencing or securing the Loan, attorney's fees which are reasonable and actually incurred by the Lender shall be payable on demand by the Borrower to the Lender, and the Borrower shall also pay on demand the cost of any and all other costs reasonably incurred by the Lender in connection with proceedings to recover any sums due hereunder. Any such amounts not paid promptly on demand shall be added to the outstanding principal balance of this Note and shall bear interest at the stated interest rate of this Note until paid in full.

(b) Nothing contained herein shall limit or impair the obligation of the Borrower to pay any and all costs and expenses for which the Borrower is otherwise liable to the Lender as provided by law.

Miscellaneous.

(a) Any provision hereof found to be illegal, invalid or unenforceable for any reason whatsoever shall not affect the validity, legality or enforceability of the remaining provisions hereof.

(b) If the effective interest rate on this Note would otherwise violate any applicable usury law, then the interest rate shall be reduced to the maximum permissible rate retroactively to the original date of this Note, and any payment received by the holder in excess of the maximum permissible rate shall be treated as a prepayment of the principal of this Note.

(c) This Note shall inure to the benefit of the Lender and its heirs, estate, personal representatives and legal guardians, endorsees and assigns. This Note may not be assigned by either the Borrower or the Lender without the prior written consent of the other party.

(d) The descriptive headings of this Note are inserted for convenience only and shall not affect the meaning or construction of any of the provisions of this Note.

(e) The terms of this Note may be amended and any rights of the Lender hereunder may be waived only if such amendment or waiver is in writing and is signed by the Lender and the Borrower.

Governing Law. The validity, construction and enforceability of this Note shall be construed in accordance with and governed by the laws of the State of Delaware, excluding rules relating to conflicts of law.

This Note has been duly executed by the Borrower and constitutes a legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms. All covenants and promises in this Note shall bind the successors and permitted assigns of the Borrower.

[Signature Page Follows]

IN WITNESS WHEREOF, the Borrower has duly executed this Demand Promissory Note effective as of the day and year first above written.

RESPIRERX PHARMACEUTICALS INC.

By: /s/ Jeff Eliot Margolis
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer,
Secretary

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAW, AND NO INTEREST HEREIN OR THEREIN MAY BE SOLD, DISTRIBUTED, ASSIGNED, OFFERED, PLEDGED OR OTHERWISE TRANSFERRED UNLESS (A) THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT AND APPLICABLE STATE SECURITIES LAWS COVERING ANY SUCH TRANSACTION, (B) THE COMPANY RECEIVES AN OPINION OF COUNSEL FOR THE HOLDER OF SUCH SECURITIES (CONCURRED IN BY COUNSEL FOR THE COMPANY) THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION, OR (C) THE COMPANY OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE COMMON STOCK

RESPIRERX PHARMACEUTICALS INC.

Warrant Number: DPN-001

Initial Exercise Date: May 22, 2023

THIS COMMON STOCK PURCHASE WARRANT (the “Warrant”) certifies that, for value received, the Arnold Lippa Family Trust of 2007 (the “Holder”) is entitled, upon the terms and conditions hereof, and subject to the limitations on exercise hereinafter set forth, at any time on or after the date hereof (the “Initial Exercise Date”) and on or prior to the 5:00 p.m. New York time, on the date that is 5 years from the initial exercise date (the “Termination Date”) but not thereafter, to subscribe for and purchase from RespireRx Pharmaceuticals Inc., up to 75,000,000 shares (as subject to adjustment hereunder, the “Warrant Shares”) of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Demand Promissory Note and Warrant Purchase Agreement dated on May 22, 2023 (the “SPA”), among the Company and the Investor. This is the warrant referred to in Section 1.(a) of the SPA.

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on any Business Day on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy of the Notice of Exercise form annexed hereto. Within three (3) Business Days, as defined below, following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer in immediately available funds or cashier’s check drawn on a United States bank in immediately available funds unless the exercise is a cashless exercise, in which case no funds would due and payable. A “Business Day” means any day other than a Saturday or Sunday or any day that national commercial banks in New York City, New York are authorized or required to close or any day that the NASDAQ stock markets or any other nationally recognized stock markets are closed. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Business Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Company, either directly or through its representative, shall maintain or cause to be maintained, records showing the number of Warrant Shares purchased and the date of such purchases, which records shall be deemed to be accurate absent manifest error. The Company shall deliver any objection to any Notice of Exercise Form within two (2) Business Days of actual receipt of such notice. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares available for purchase hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$0.0015 per share, subject to adjustment hereunder (the “Exercise Price”).

c) Cashless Exercise. This Warrant may be exercised at any time otherwise permitted by means of a “cashless exercise” in which the Holder shall be entitled to receive a certificate for the number of Warrant Shares equal to the quotient obtained by the following formula:

$$\frac{(A-B) \times (X)}{(A)}$$

Where:

(A) = the Closing Price on the Trading Day immediately preceding the date of such election (“Trading Day” means any Business Day, or, if the Common Stock of the Company is traded on an exchange, the OTC Pink Market or any other OTC market or other quotation system, then any Business Day on which such exchange, the OTC Pink Market or any OTC market or quotation system is open for trading the Common Stock of the Company);

(B) = the Exercise Price of this Warrant, as adjusted; and

(X) = the number of Warrant Shares issuable upon exercise of this Warrant in accordance with the terms of this Warrant by means of a cash exercise rather than a cashless exercise.

As used herein, “Closing Price”, shall mean the first of the following clauses that applies: (1) if, at the time of any such calculation, the Common Stock is listed or quoted on the NYSE MKT, or the New York Stock Exchange, or the NASDAQ Global Market, the NASDAQ Global Select Market, the NASDAQ Capital Market or any other U.S. national exchange, the Closing Price shall be the closing or last sale price reported for the last business day immediately preceding the date of any such calculation; (2) if, at the time of any such calculation, the Common Stock is quoted on the OTC Pink Market or any other OTC market published by the National Quotation Bureau Inc. or a similar agency or organization succeeding to its function or reporting prices, the Closing Price shall be the average of the closing prices reported for the last five (5) days during which the Common Stock actually traded and for which a closing price is available immediately preceding the date of any such calculation, or (3) in all other cases, the Closing Price of a share of Common Stock shall be the price determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company.

d) Mechanics of Exercise.

i. Delivery of Certificates Upon Exercise. Certificates for shares issuable upon the exercise hereof shall be transmitted by the transfer agent of the Company to the Holder by crediting the account of the Holder’s broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission (“DWAC”) system if the Company is a participant in such system and such shares are eligible for legend removal or such other book-entry or electronic delivery system agreed by Holder and the Company, or otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise on the date that is no more than five (5) Business Days after the latest of (A) the delivery to the Company of the Notice of Exercise, (B) surrender of this Warrant (if required), and (C) any required payment of the aggregate Exercise Price as set forth above (such date, the “Warrant Share Delivery Date”). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the latter of the date the Warrant has been exercised and any required payment to the Company of the Exercise Price has been made in good funds by either certified check, wire transfer or other similar payment method and all taxes required to be paid by the Holder as set forth in Section 2(a) above, if any, pursuant to Section 2(d)(v) prior to the issuance of such shares, having been paid.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to transmit or to cause the transfer agent of the Company to transmit to the Holder a certificate or the certificates representing the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

v. Charges, Taxes and Expenses. Issuance of certificates for Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event certificates for Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto (the "Assignment Form") duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

vi. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

vii. Acquisitions. If at any time while this Warrant is outstanding there is an Acquisition (as defined below), then the Holder shall receive from any surviving entity or successor to the Company, in exchange for this Warrant, a new warrant in the surviving entity or successor to the Company substantially in the form of this Warrant and with an exercise price adjusted to reflect the Common Stock equivalent price offered in the Acquisition. An "Acquisition" shall mean the closing of a merger, share exchange, consolidation, acquisition of all or substantially all of the assets or stock, reorganization or liquidation of the Company that results in the stockholders of the Company immediately prior to such transaction owning less than 50% of the voting capital stock of the Company (or its successor or parent corporation) immediately after the transaction or, in the case of a sale of assets or liquidation, the Company owning after the transaction less than substantially all of the assets owned by the Company prior to the transaction (other than an issuance of equity securities for the primary purpose of raising capital) or any other event that constitutes a "Capital Change" under the Company's Second Restated Certificate of Incorporation, as it may be amended, restated or otherwise modified from time to time. The Holder shall execute all documentation required to be executed by the Company or the acquirer or successor of the Company in connection with the Acquisition, including, without limitation, escrow, indemnification and other similar agreements. Subject to and to the extent permitted by applicable law, the Company will endeavor to notify the Holder of any proposed Acquisition at least 30 days prior to the date of any Acquisition (or such shorter period as reasonably practicable under the circumstances); provided that the failure to so notify the Holder shall not in any way impair the Acquisition.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant and which shall not include any dividends paid-in-kind in respect to any series of convertible preferred stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

b) Calculations. All calculations under this Section 3 shall be made to the nearest $1/100^{\text{th}}$ of a cent or the nearest $1/100^{\text{th}}$ of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

c) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to this Section 3, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (B) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, or (C) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, any of the events in Section 3.(c)ii (A), (B) or (C) being an “Event”, then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register of the Company, at least ten (10) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such Event is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such Event; provided that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the Event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with an Assignment Form duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall, either directly or through its representative, record or cause to be recorded, this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time, which Warrant Register shall be deemed to be accurate absent manifest error. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant satisfy any other reasonable conditions established by the Company, including without limitation, a legal opinion reasonably acceptable to the Company with respect to such transfer.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act. The Holder acknowledges that the Warrant Shares will not be registered under the Securities Act of 1933, as amended, or any applicable statute or foreign securities law, and will therefore not be freely transferable.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i).

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the trading market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, 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 Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or reasonably appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or reasonably appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. This Warrant is a contract between the Company and the Holder and its terms shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed in the State of New York, without giving effect to any choice or conflict of law provision or rule of that or any other jurisdiction. The Company and each Holder irrevocably consent to the jurisdiction of the United States federal courts and the state courts located in New York City, in any suit or proceeding based on or arising under this Warrant and irrevocably agree that all claims in respect of such suit or proceeding may be determined in such courts. The Company and each Holder irrevocably waives the defense of an inconvenient forum to the maintenance of such suit or proceeding in such forum. The Company further agrees that service of process upon the Company mailed by first class mail shall be deemed in every respect effective service of process upon the Company in any such suit or proceeding. Nothing herein shall affect the right of any Holder to serve process in any other manner permitted by law. The Company agrees that a final non-appealable judgment in any such suit or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on such judgment or in any other lawful manner.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be deemed delivered the day after the date sent if sent by overnight courier, the same day sent if sent by facsimile transmission with confirmation of receipt by the Holder or three (3) days after deposit with the US Postal Service if sent via certified mail or first class mail if sent to the Holder at the address on the last date on which Holder communicated its contact information to the Company, or if sent by email effective on the date of the email, if a confirmation of email receipt is received by the Holder or if by the next Business Day, copy has been transmitted by any other approved method based.

i) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

j) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. Such successors or permitted assigns of the Holder shall be deemed to be the Holder for all purposes hereunder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares. Nothing herein, express or implied, is intended to or shall confer upon any other person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

k) Entire Agreement. This Warrant constitutes the sole and entire agreement of the parties to this Warrant with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

o) Waiver of Jury Trial. Each party acknowledges and agrees that any controversy which may arise under this Warrant is likely to involve complicated and difficult issues and, therefore, each such party irrevocably and unconditionally waives any right it may have to a trial by jury in respect of any legal action arising out of or relating to this Warrant or the transactions contemplated hereby.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the 22nd day of May, 2023.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the 22nd day of May, 2023.

RESPIRERX PHARMACEUTICALS INC.

By /s/ Jeff Eliot Margolis
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer &
Secretary

NOTICE OF EXERCISE

TO: RESPIRERX PHARMACEUTICALS, INC.

(1) The undersigned, pursuant to the provisions set forth in the attached Warrant No. _____, hereby irrevocably elects to purchase *(check applicable box)*:

☐ _____ shares of the Common Stock of RespireRx Pharmaceuticals, Inc. covered by such Warrant; or

☐ the maximum number of shares of Common Stock covered by such Warrant pursuant to the cashless exercise procedure set forth in Section 2(c), calculated as follows:
(insert calculation)

(2) The undersigned herewith makes payment of the full purchase price for such shares at the price per share provided for in such Warrant. Such payment takes the form of *(check applicable box or boxes)*:

☐ \$ _____ in lawful money of the United States; and/or

☐ if the provisions of Section 2(c) of this Warrant are in effect, the cancellation of such portion of the attached Warrant as is exercisable for a total of _____ Warrant Shares (using a Closing Price of \$ _____ per share for purposes of this calculation); and/or

(3) Please issue a certificate or certificates representing said Warrant Shares in the name of the undersigned or in such other name as is specified below:

(please print or type name and address)

(please insert social security or other identifying number)

The Warrant Shares shall be delivered to the following:

(please print or type name and address)

and if such number of shares of Common Stock shall not be all the shares evidenced by this Warrant Certificate, that a new Warrant for the balance of such shares be registered in the name of, and delivered to, Holder.

The Warrant Shares shall be delivered to the following DWAC Account Number or by physical delivery of a certificate to:

(4) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity:

Name of Authorized Signatory:

Title of Authorized Signatory:

Date: _____

ASSIGNMENT FORM

(To assign the foregoing warrant, execute
this form and supply required information.
Do not use this form to exercise the warrant.)

FOR VALUE RECEIVED, [] all of or [] shares of the foregoing Warrant and all rights evidenced thereby are
hereby assigned to

whose address is

.

Dated: ,

Holder’s Signature:

Holder’s Address:

Signature Guaranteed:

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without
alteration or enlargement or any change whatsoever, and must be guaranteed by a bank or trust company. Officers of corporations and
those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

DEMAND PROMISSORY NOTE AND WARRANT PURCHASE AGREEMENT

This Demand Promissory Note and Warrant Purchase Agreement, dated as of May 22, 2023 (“**Agreement**”), is entered into by and among RespireRx Pharmaceuticals Inc. (the “**Company**”), a corporation incorporated in the state of Delaware, and the undersigned person or entity listed on the schedule attached hereto as **Schedule I** (the “**Investor**”).

The Company and the Investor hereby agree as follows:

1. *The Demand Promissory Note and Warrant.*

(a) *Authorization of the Issuance of the Demand Promissory Note and Warrant.* The Company has authorized the issuance and sale of a \$25,000.00 Demand Promissory Note (“**Note**”) substantially in the form set out in **Exhibit A** hereto and Warrant (“**Warrant**”) in substantially the form set out in **Exhibit B** hereto and which Warrant represents the right to purchase up to 8,333,333 shares of Common Stock during the Warrant exercise period at the Warrant exercise price per share of Common Stock. References to an “Exhibit” or “Schedule” are references to an Exhibit or Schedule attached to this Agreement unless otherwise specified. References to a “Section” are references to a Section of this Agreement unless otherwise specified.

(b) *Issuance of Note and Warrant.* At the Closing provided for in Section 1(c) on the terms and subject to the conditions hereof, the Company agrees to issue and sell to Investor, and Investor agrees to purchase from the Company, the Note and Warrant in the investment amount (“**Investment Amount**”) set forth on **Schedule I**.

(c) *Closing; Use of Proceeds.* The sale and purchase of the Note and Warrant to be purchased by the Investor shall take place at a closing (“**Closing**”) to be held at such place and time as the Company and the Investor may determine (“**Closing Date**”). At the Closing, the Company will deliver to the Investor the Note and the Warrant to be purchased by Investor dated the date of the Closing and registered in the Investor’s name, against receipt by the Company of Investor’s Investment Amount for the account of the Company by wire transfer of immediately available funds in accordance with the Company’s instructions. The proceeds from the sale of the Note and Warrant shall be used for costs and expenses of the Company and/or its subsidiary, ResolutionRx Ltd in connection with research and development, general and administrative purposes, and working capital.

2. *Representations and Warranties of the Company.* The Company represents and warrants to Investor that, except as set forth in the Company’s periodic financial and other filings with the U.S. Securities and Exchange Commission (“**SEC Documents**”):

(a) *Due Incorporation, Qualification.* The Company (i) is a corporation duly organized, validly existing and in good standing under the laws of its jurisdiction of organization; (ii) has the power and authority to own, lease and operate its properties and carry on its business as now conducted; and (iii) is duly qualified, licensed to do business and in good standing as a foreign corporation in each jurisdiction where such qualification or license is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing could not reasonably be expected to have a material adverse effect on the Company and its subsidiaries taken as a whole.

(b) *Authority; Enforceability.* The execution, delivery and performance by the Company of this Agreement and the Note and Warrant issued hereunder (collectively, the “**Transaction Documents**”) and the consummation of the transactions contemplated hereby and thereby (i) are within the corporate power of the Company and (ii) have been duly authorized by all necessary corporate action on the part of the Company. Each Transaction Document executed by the Company has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the enforcement of creditors’ rights generally and general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(c) *Non-Contravention*. The execution and delivery by the Company of the Transaction Documents executed by the Company and the performance and consummation of the transactions contemplated thereby do not (i) violate the Company's Articles of Incorporation, Certificate of Incorporation, Bylaws or other formation or charter documents, as applicable (as amended, the "**Charter Documents**"), (ii) violate any material judgment, order, writ, decree, statute, rule or regulation applicable to the Company; (iii) result in the breach of any material provision of or in the acceleration of, or entitle any other person to accelerate (whether after the giving of notice or lapse of time or both), any material mortgage, indenture, agreement, instrument or contract to which the Company is a party or by which it is bound; or (iv) result in the creation or imposition of any lien or encumbrance upon any property, asset or revenue of the Company under any material agreement or instrument to which the Company is bound.

(d) *Litigation*. As of the date of the Closing, no actions (including, without limitation, derivative actions), suits, proceedings or investigations are pending or, to the knowledge of the Company, threatened in writing against the Company or the Company's subsidiaries, if any, at law or in equity in any court or before any other governmental authority.

(e) *Title*. The Company and the Company's subsidiaries, if any, own and have good and marketable title in fee simple absolute to, or a valid leasehold interest in, all their respective real properties and good title to their other respective assets and properties. Such assets and properties are subject to no material liens or encumbrances.

(f) *Intellectual Property*. The Company and the Company's subsidiaries, if any, own or possess sufficient legal rights to all patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, processes and other intellectual property rights necessary for its business as now conducted and as proposed to be conducted, without, to the actual knowledge of management, any conflict with, or infringement of, the rights of others. Each employee of the Company has executed, or will execute, a confidential information and invention assignment agreement in favor of the Company. The Company has entered into or intends to enter into, an agreement containing appropriate confidentiality and invention assignment provisions in favor of the Company with each consultant to and vendor of the Company, as appropriate, that has or will have access to the Company's intellectual property.

(g) *Debt for Borrowed Money*. As of the date of this Agreement, the Company does not have any outstanding debt for borrowed money, other than as disclosed in the SEC Documents.

3. Representations and Warranties of Investors. Investor represents and warrants to the Company upon the acquisition of Note and Warrant as follows:

(a) *Binding Obligation*. Investor has full legal capacity, power and authority to execute and deliver this Agreement and to perform its obligations hereunder. This Agreement and the Transaction Documents constitute valid and binding obligations of Investor, enforceable in accordance with their terms, except as limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the enforcement of creditors' rights generally and general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(b) *Securities Law Compliance.* Investor has been advised that the Note and the Warrant and the underlying securities have not been registered under the Securities Act of 1933, as amended (the “**Securities Act**”), or any state securities laws and, therefore, cannot be resold unless they are registered under the Securities Act and applicable state securities laws or unless an exemption from such registration requirements is available. Investor has not been formed solely for the purpose of making this investment and is purchasing the Note and Warrant to be acquired by Investor hereunder for its own account for investment, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof. Investor has no present intention of selling, granting any participation in, or otherwise distributing the same and Investor does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer, grant any participation in or otherwise distribute all or any part of the Note or Warrant. Investor has such knowledge and experience in financial and business matters that Investor is capable of evaluating the merits and risks of such investment, is able to incur a complete loss of the investment without impairing Investor’s financial condition and is able to bear the economic risk of the investment for an indefinite period of time. Investor is an accredited investor as such term is defined in Rule 501 of Regulation D under the Securities Act. Investor further represents that Investor has had the opportunity to ask questions of the Company and received answers concerning the terms and conditions of the sale of the Note and Warrant.

(c) *Source of Funds.* Investor represents that, as to each source of funds (each a “**Source**”) to be used by Investor to pay the purchase price of the Note and Warrant to be purchased by Investor hereunder, the Source does not include assets of any employee benefit plan, other than a plan exempt from the coverage of the Employee Retirement Income Security Act of 1974, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

4. ***Conditions to Closing of the Investor.*** Investor’s obligations at the Closing are subject to the fulfillment, on or prior to the applicable Closing Date, of all of the following conditions:

(a) *Representations and Warranties.* The representations and warranties made by the Company were true and correct when made and are true and correct in all material respects on the Closing Date.

(b) *Governmental Approvals and Filings.* Except for any notices required or permitted to be filed after the Closing Date with certain federal and state securities commissions, the Company shall have obtained all governmental approvals required in connection with the lawful sale and issuance of the Note and Warrant.

(c) *Legal Requirements.* On the date of the Closing, the sale and issuance by the Company, and the purchase by the Investor, of the Note and Warrant shall be legally permitted by all laws and regulations to which Investor or the Company are subject.

(d) *Transaction Documents.* The Company shall have duly executed and delivered to the Investor the following documents: (i) this Agreement and (ii) the Note and Warrant issued hereunder on the date of the applicable Closing.

5. ***Conditions to Obligations of the Company.*** The Company’s obligation to issue and sell the Note and Warrant at the Closing with respect to the Investor, is subject to the fulfillment, on or prior to the applicable Closing Date, of all of the following conditions:

(a) *Representations and Warranties.* The representations and warranties made by the Investor in **Section 3** hereof shall be true and correct when made and shall be true and correct on the Closing Date.

(b) *Legal Requirements.* On the date of the Closing, the sale and issuance by the Company, and the purchase by the Investor, of the Note and Warrant shall be legally permitted by all laws and regulations to which Investor or the Company are subject.

(c) *Transaction Documents.* With respect to the obligation to sell and issue the Note and Warrant to Investor, Investor shall have duly executed and delivered to the Company (i) this Agreement and (ii) an acceptance by Investor of the Note and Warrant issued hereunder to Investor on the date of the Closing.

6. Disclosures.

(a) *No Broker's or Finder's Fees.* There are no brokers or finders owed fees by the Company with respect to the transaction contemplated in this Agreement or the Transaction Documents.

(b) *Arm's Length Negotiation.* The Company has not set the purchase price through an arms-length negotiation with Investor or Investor representative. The Company believes the price at which the Note and Warrant are being offered appropriately reflects economic realities under the Company's current circumstances. However, there can be no assurances that the Note and Warrant are not worth substantially less than the price at which they are being sold.

(c) *Legal Counsel.* Investor hereby represents and warrants that it has consulted with legal counsel of its choosing or has had sufficient opportunity to consult with legal counsel of its choosing, in respect of the terms and conditions of this Agreement and the Note and Warrant.

7. Miscellaneous.

(a) *Waivers; Amendments.* Except as otherwise expressly provided in the Note (with respect to only the Note), any provision of this Agreement and the Note may be amended, waived or modified only upon the written consent of the Company and Investor. Furthermore, except as otherwise expressly provided in the Warrant (with respect to only the Warrant), any provision of this Agreement and the Warrant may be amended, waived or modified only upon the written consent of the Company and Investor.

(b) *Nature of Investment.* For the avoidance of doubt, the parties hereto acknowledge and agree that the payment of the Investment Amount to the Company by the Investor in respect of the Note (but not in respect of any Warrant) will be deemed to be a debt investment in the Note issued by the Company.

(c) *Governing Law.* This Agreement and all actions arising out of or in connection with this Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law provisions of the State of New York or of any other state.

(d) *Survival.* The representations, warranties, covenants and agreements made herein shall survive the execution and delivery of this Agreement.

(e) *Successors and Assigns.* Subject to the restrictions on transfer described in **Section 6(f)** below, the rights and obligations of the Company and the Investor shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

(f) *Assignment.* The rights, interests or obligations hereunder and under the Warrant may not be assigned, by operation of law or otherwise, in whole or in part, by the Company without the prior written consent of the Investor. Unless provided for otherwise in this Agreement or the Transaction Documents, the rights, interests or obligations hereunder and under the Warrant may not be assigned by Investor without the prior written consent of the Company.

(g) *Entire Agreement.* This Agreement together with the other Transaction Documents constitute and contain the entire agreement among the Company and Investor and supersede any and all prior agreements, negotiations, correspondence, understandings and communications among the parties, whether written or oral, respecting the subject matter hereof.

(h) *Notices.* All notices, demands, consents, or other communications hereunder shall in writing and faxed, mailed or delivered to each party as follows: (i) if to Investor, at such Investor’s address or facsimile number set forth in **Schedule I**, or at such other address as Investor shall have furnished the Company in writing in accordance with this paragraph, or (ii) if to the Company, at such address or fax number set forth on the signature pages hereto, or at such other address or facsimile number as the Company shall have furnished to Investor in writing in accordance with this paragraph. All such communications will be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one business day after being delivered by facsimile (with receipt of appropriate confirmation) or email (with receipt of appropriate confirmation, or if followed within one day by another acceptable means of notice), (iv) one business day after being deposited with an overnight courier service of recognized standing or (v) four days after being deposited in the U.S. mail, first class with postage prepaid.

(i) *Expenses.* Each of the Company and Investor will bear their own respective expenses associated with the negotiation, execution and delivery of this Agreement and the Note and Warrant.

(j) *Only Company Liable.* In no event shall any stockholder, officer, director or employee of the Company be liable for any amounts due or payable pursuant to this Agreement or any Transaction Document.

(k) *Severability.* If any provision of this Agreement shall be judicially determined to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(l) *Headings.* Headings used in this Agreement have been included for convenience and ease of reference only, and will not in any manner influence the construction or interpretation of any provision of this Agreement.

(m) *Counterparts.* This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Facsimile copies of signed signature pages will be deemed binding originals.

Signature page follows

The parties have caused this Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

COMPANY:

RESPIRERX PHARMACEUTICALS INC.
a Delaware corporation

By: /s/ Jeff Eliot Margolis
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer &
 Secretary

Address for notices:
RespireRx Pharmaceuticals Inc.
Attention: Jeff Eliot Margolis
Senior Vice President, Chief Financial Officer, Treasurer & Secretary
126 Valley Road, Suite C
Glen Rock, NJ 07452
(phone): 917-834-7206
(fax): 415-887-7814

INVESTOR:

Marc M. Radin

By: /s/ Marc M. Radin (signature)
Print Name: Marc M. Radin
Print Title: Investor/Lender

Schedule I and Exhibit A and Exhibit B follow:

INVESTOR:

Marc M. Radin PC

By: /s/ Marc M. Radin (signature)
Print Name: Marc M. Radin
Print Title: Owner

Address line 1: c/o Marc M. Radin PC

Address line 2: 126 Valley Road, Suite C

City, State, Zip, other postal code as applicable, Country: Glen Rock, NJ 07452

Phone: ***

Email: ***

Fax: ***

Social Security Number or Tax Identification Number as appropriate: ***

Investment Amount in Dollars: \$25,000.00

Principal Amount of Demand Promissory Note Purchased
(same as investment amount): \$25,000.00

Number of Shares of Common Stock underlying Warrant
(Principal Amount of Note divided by \$0.003): 8,333,333

EXHIBIT A
FORM OF DEMAND PROMISSORY NOTE
[see attached]

DEMAND PROMISSORY NOTE

\$25,000.00

May 22, 2023

FOR VALUE RECEIVED, **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (the “**Borrower**”), with a mailing address at 126 Valley Road, Suite C, Glen Rock, New Jersey 07452, hereby promises to pay *on demand* and to the order of the Marc M. Radin (the “**Lender**”), with an address of c/o Marc M Radin PC, 126 Valley Road, Suite C, Glen Rock, NJ 07452, or at such other place as the holder hereof may designate in writing, the principal sum of twenty-five thousand dollars and no cents (\$25,000.00), together with interest thereon at the interest rate as set forth herein (the “**Loan**”). The Lender’s books and records as to amounts due under this Note shall be conclusive absent manifest error.

Principal and Interest. Principal and accrued interest thereon shall be immediately due and payable upon demand of the Lender. Interest shall accrue on the outstanding principal amount at a rate equal to 10% per annum. Interest shall be calculated on the basis of the actual number of days elapsed and a year of 365/366 days, as applicable. Any accrued but unpaid interest shall be added to the principal balance on the last day of each year that the principal is outstanding and unpaid.

Payments; Prepayments.

(a) Payment, when paid, shall be applied first to the payment of all interest accrued and unpaid on this Note and then to payment on account of the principal hereof.

(b) This Note may be prepaid in whole or in part at any time, without premium or penalty. Each prepayment must be accompanied by a written notice of such prepayment indicating the amount of such payment to be applied as a prepayment of principal.

Default. If the Borrower fails to make any payment when the same shall become due and payable, then the holder of this Note may declare the unpaid principal balance under this Note to be immediately due and payable and thereupon such balance shall become due and payable without presentation, protest or further demand or notice of any kind, all of which are hereby expressly waived, and the holder of this Note shall be entitled to receive, to the extent lawful, all costs, including reasonable attorney’s fees and expenses, for the collection of such amounts.

Time is of the Essence. *Time is of the essence with respect to each and every term and provision of this Note.*

Security Agreement.

(a) To secure its obligations under this Note and to induce the Lender to extend the Loan to the Borrower, the Borrower hereby grants, conveys and assigns to the Lender a security interest in and to, all of such Borrower’s right, title and interest in and to all of the following property, in all its forms, in each case whether now or hereafter existing, whether now owned or hereafter acquired, created or arising, and wherever located (collectively, but without duplication, the “**Collateral**”): all Equipment, Inventory and other Goods, Accounts, General Intangibles (including, without limitation, all of the Borrower’s patents and patent applications, trademarks and trademark applications, registered copyrights, domain names, and all licenses for the use of any patents, trademarks, copyrights and domain names of the Borrower), Fixtures, Documents, Letter-of-Credit Rights and Chattel Paper, Deposit Accounts, Instruments and Investment Property including equity interests in other companies, Commercial Tort Claims, Supporting Obligations, and all Proceeds of any and all of the foregoing (as all such capitalized terms used in this paragraph are as defined in the Uniform Commercial Code in effect in the State of Delaware); *provided, that* to the extent that any of the foregoing Collateral is subject, prior to the date hereof, to a security interest in favor of a third party and the agreement with such third party expressly prohibits any grant of a security interest therein, the Borrower will not be deemed to have a security interest in such Collateral only for so long as such prohibition continues. This Note shall constitute a security agreement for the purpose of granting to the Lender a security interest in the Collateral. The Borrower makes no representation to the Lender as to value of any Collateral or the priority of any lien on the Collateral which is granted hereby by the Borrower to the Lender in relation to any other liens on the Collateral which may exist of record as of the date hereof. By its acceptance of this Note, the Lender agrees hereby that to the extent that a prior security interest has been granted in and a lien exists on any of the Collateral pursuant to any other security agreement and perfected lien, the Lender shall have a lien which is subordinate to such prior lien of record.

(b) The Borrower hereby authorizes the Lender and appoints the Lender as its attorney-in-fact, to file in such office or offices as the Lender deems necessary or desirable, such financing and continuation statements and amendments and supplements thereto, and such other documents as the Lender may require to perfect, preserve and protect the security interests granted herein.

(c) The Borrower agrees that from time to time, at the expense of the Borrower, it will promptly execute and deliver all such further instruments and documents, and take all such further action as may be necessary or desirable, or as the Lender may reasonably request, in order to perfect and protect any security interest granted or purported to be granted hereby or to enable the Lender to exercise and enforce its rights and remedies hereunder and with respect to any Collateral or to otherwise carry out the purposes of this security agreement.

(d) The Borrower will, at its sole cost and expense, preserve and defend the Collateral, keep the Collateral in good condition at all times, and preserve the Collateral free and clear of all other liens and encumbrances, except liens existing prior to the effective date of this Loan or which the Lender has consented to and for taxes not yet due and payable. However, the foregoing will not prevent the Borrower from terminating its interest in and/or abandoning any Collateral if, in its reasonable discretion, such Collateral has no further value to the Borrower.

(e) The Borrower will not sell any Collateral outside the ordinary course of business without the prior written consent of the Lender, which consent shall not be unreasonably withheld, delayed or conditioned.

(f) The Borrower will keep itself and the Collateral insured against all hazards in such amounts as the Lender may reasonably require.

(g) Upon the occurrence and during the continuation of a default hereunder, the Lender may exercise, in addition to any other rights and remedies provided herein, under other contracts and under law, all the rights and remedies of a secured party under the Uniform Commercial Code.

Waiver. The Borrower hereby waives, unless otherwise provided for in this Note, demand, notice of presentment, protest, notice of dishonor and protest, rights of extension and any defense by reason of extension of time or other indulgences granted by the Lender.

Notices. Any notice, presentation or demand to or upon the Borrower in respect of this Note may be given or made by being mailed by registered or certified mail addressed to the Borrower at the address first written above or, if any other address shall at any time be designated for this purpose by the Borrower in writing to the holder of this Note at the time of such notice, to such other address. Notice shall be deemed received three (3) days after posting the same. Notice may also be given by hand-delivery, by facsimile transmission with confirmation of receipt or by email, effective on the date of the email, if a confirmation of email receipt is received by the Lender or if a copy has been transmitted by any other approved method.

Costs and Expenses.

(a) If the Lender retains the services of legal counsel in order to enforce any remedy available to the Lender under any document or instrument evidencing or securing the Loan, attorney's fees which are reasonable and actually incurred by the Lender shall be payable on demand by the Borrower to the Lender, and the Borrower shall also pay on demand the cost of any and all other costs reasonably incurred by the Lender in connection with proceedings to recover any sums due hereunder. Any such amounts not paid promptly on demand shall be added to the outstanding principal balance of this Note and shall bear interest at the stated interest rate of this Note until paid in full.

(b) Nothing contained herein shall limit or impair the obligation of the Borrower to pay any and all costs and expenses for which the Borrower is otherwise liable to the Lender as provided by law.

Miscellaneous.

(a) Any provision hereof found to be illegal, invalid or unenforceable for any reason whatsoever shall not affect the validity, legality or enforceability of the remaining provisions hereof.

(b) If the effective interest rate on this Note would otherwise violate any applicable usury law, then the interest rate shall be reduced to the maximum permissible rate retroactively to the original date of this Note, and any payment received by the holder in excess of the maximum permissible rate shall be treated as a prepayment of the principal of this Note.

(c) This Note shall inure to the benefit of the Lender and its heirs, estate, personal representatives and legal guardians, endorsees and assigns. This Note may not be assigned by either the Borrower or the Lender without the prior written consent of the other party.

(d) The descriptive headings of this Note are inserted for convenience only and shall not affect the meaning or construction of any of the provisions of this Note.

(e) The terms of this Note may be amended and any rights of the Lender hereunder may be waived only if such amendment or waiver is in writing and is signed by the Lender and the Borrower.

Governing Law. The validity, construction and enforceability of this Note shall be construed in accordance with and governed by the laws of the State of Delaware, excluding rules relating to conflicts of law.

This Note has been duly executed by the Borrower and constitutes a legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms. All covenants and promises in this Note shall bind the successors and permitted assigns of the Borrower.

[Signature Page Follows]

IN WITNESS WHEREOF, the Borrower has duly executed this Demand Promissory Note effective as of the day and year first above written.

RESPIRERX PHARMACEUTICALS INC.

By: _____
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial
Officer, Treasurer, Secretary

EXHIBIT B
FORM OF WARRANT
[see attached]

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAW, AND NO INTEREST HEREIN OR THEREIN MAY BE SOLD, DISTRIBUTED, ASSIGNED, OFFERED, PLEDGED OR OTHERWISE TRANSFERRED UNLESS (A) THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT AND APPLICABLE STATE SECURITIES LAWS COVERING ANY SUCH TRANSACTION, (B) THE COMPANY RECEIVES AN OPINION OF COUNSEL FOR THE HOLDER OF SUCH SECURITIES (CONCURRED IN BY COUNSEL FOR THE COMPANY) THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION, OR (C) THE COMPANY OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE COMMON STOCK

RESPIRERX PHARMACEUTICALS INC.

Warrant Number: DPN-002

Initial Exercise Date: May 22, 2023

THIS COMMON STOCK PURCHASE WARRANT (the “Warrant”) certifies that, for value received, Marc M. Radin (the “Holder”) is entitled, upon the terms and conditions hereof, and subject to the limitations on exercise hereinafter set forth, at any time on or after the date hereof (the “Initial Exercise Date”) and on or prior to the 5:00 p.m. New York time, on the date that is 5 years from the initial exercise date (the “Termination Date”) but not thereafter, to subscribe for and purchase from RespireRx Pharmaceuticals Inc., up to 8,333,333 shares (as subject to adjustment hereunder, the “Warrant Shares”) of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Demand Promissory Note and Warrant Purchase Agreement dated on May 22, 2023 (the “SPA”), among the Company and the Investor. This is the warrant referred to in Section 1.(a) of the SPA.

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on any Business Day on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy of the Notice of Exercise form annexed hereto. Within three (3) Business Days, as defined below, following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer in immediately available funds or cashier’s check drawn on a United States bank in immediately available funds unless the exercise is a cashless exercise, in which case no funds would due and payable. A “Business Day” means any day other than a Saturday or Sunday or any day that national commercial banks in New York City, New York are authorized or required to close or any day that the NASDAQ stock markets or any other nationally recognized stock markets are closed. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Business Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Company, either directly or through its representative, shall maintain or cause to be maintained, records showing the number of Warrant Shares purchased and the date of such purchases, which records shall be deemed to be accurate absent manifest error. The Company shall deliver any objection to any Notice of Exercise Form within two (2) Business Days of actual receipt of such notice. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares available for purchase hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$0.0015 per share, subject to adjustment hereunder (the “Exercise Price”).

c) Cashless Exercise. This Warrant may be exercised at any time otherwise permitted by means of a “cashless exercise” in which the Holder shall be entitled to receive a certificate for the number of Warrant Shares equal to the quotient obtained by the following formula:

$$\frac{(A-B) \times (X)}{(A)}$$

Where:

(A) = the Closing Price on the Trading Day immediately preceding the date of such election (“Trading Day” means any Business Day, or, if the Common Stock of the Company is traded on an exchange, the OTC Pink Market or any other OTC market or other quotation system, then any Business Day on which such exchange, the OTC Pink Market or any OTC market or quotation system is open for trading the Common Stock of the Company);

(B) = the Exercise Price of this Warrant, as adjusted; and

(X) = the number of Warrant Shares issuable upon exercise of this Warrant in accordance with the terms of this Warrant by means of a cash exercise rather than a cashless exercise.

As used herein, “Closing Price”, shall mean the first of the following clauses that applies: (1) if, at the time of any such calculation, the Common Stock is listed or quoted on the NYSE MKT, or the New York Stock Exchange, or the NASDAQ Global Market, the NASDAQ Global Select Market, the NASDAQ Capital Market or any other U.S. national exchange, the Closing Price shall be the closing or last sale price reported for the last business day immediately preceding the date of any such calculation; (2) if, at the time of any such calculation, the Common Stock is quoted on the OTC Pink Market or any other OTC market published by the National Quotation Bureau Inc. or a similar agency or organization succeeding to its function or reporting prices, the Closing Price shall be the average of the closing prices reported for the last five (5) days during which the Common Stock actually traded and for which a closing price is available immediately preceding the date of any such calculation, or (3) in all other cases, the Closing Price of a share of Common Stock shall be the price determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company.

d) Mechanics of Exercise.

i. Delivery of Certificates Upon Exercise. Certificates for shares issuable upon the exercise hereof shall be transmitted by the transfer agent of the Company to the Holder by crediting the account of the Holder’s broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission (“DWAC”) system if the Company is a participant in such system and such shares are eligible for legend removal or such other book-entry or electronic delivery system agreed by Holder and the Company, or otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise on the date that is no more than five (5) Business Days after the latest of (A) the delivery to the Company of the Notice of Exercise, (B) surrender of this Warrant (if required), and (C) any required payment of the aggregate Exercise Price as set forth above (such date, the “Warrant Share Delivery Date”). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the latter of the date the Warrant has been exercised and any required payment to the Company of the Exercise Price has been made in good funds by either certified check, wire transfer or other similar payment method and all taxes required to be paid by the Holder as set forth in Section 2(a) above, if any, pursuant to Section 2(d)(v) prior to the issuance of such shares, having been paid.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to transmit or to cause the transfer agent of the Company to transmit to the Holder a certificate or the certificates representing the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

v. Charges, Taxes and Expenses. Issuance of certificates for Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event certificates for Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto (the "Assignment Form") duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

vi. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

vii. Acquisitions. If at any time while this Warrant is outstanding there is an Acquisition (as defined below), then the Holder shall receive from any surviving entity or successor to the Company, in exchange for this Warrant, a new warrant in the surviving entity or successor to the Company substantially in the form of this Warrant and with an exercise price adjusted to reflect the Common Stock equivalent price offered in the Acquisition. An "Acquisition" shall mean the closing of a merger, share exchange, consolidation, acquisition of all or substantially all of the assets or stock, reorganization or liquidation of the Company that results in the stockholders of the Company immediately prior to such transaction owning less than 50% of the voting capital stock of the Company (or its successor or parent corporation) immediately after the transaction or, in the case of a sale of assets or liquidation, the Company owning after the transaction less than substantially all of the assets owned by the Company prior to the transaction (other than an issuance of equity securities for the primary purpose of raising capital) or any other event that constitutes a "Capital Change" under the Company's Second Restated Certificate of Incorporation, as it may be amended, restated or otherwise modified from time to time. The Holder shall execute all documentation required to be executed by the Company or the acquirer or successor of the Company in connection with the Acquisition, including, without limitation, escrow, indemnification and other similar agreements. Subject to and to the extent permitted by applicable law, the Company will endeavor to notify the Holder of any proposed Acquisition at least 30 days prior to the date of any Acquisition (or such shorter period as reasonably practicable under the circumstances); provided that the failure to so notify the Holder shall not in any way impair the Acquisition.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant and which shall not include any dividends paid-in-kind in respect to any series of convertible preferred stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

b) Calculations. All calculations under this Section 3 shall be made to the nearest $1/100^{\text{th}}$ of a cent or the nearest $1/100^{\text{th}}$ of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

c) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to this Section 3, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (B) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, or (C) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, any of the events in Section 3.(c)ii (A), (B) or (C) being an “Event”, then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register of the Company, at least ten (10) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such Event is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such Event; provided that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the Event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with an Assignment Form duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall, either directly or through its representative, record or cause to be recorded, this Warrant, upon records to be maintained by the Company for that purpose (the “Warrant Register”), in the name of the record Holder hereof from time to time, which Warrant Register shall be deemed to be accurate absent manifest error. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant satisfy any other reasonable conditions established by the Company, including without limitation, a legal opinion reasonably acceptable to the Company with respect to such transfer.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act. The Holder acknowledges that the Warrant Shares will not be registered under the Securities Act of 1933, as amended, or any applicable statute or foreign securities law, and will therefore not be freely transferable.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i).

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the trading market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, 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 Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or reasonably appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or reasonably appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. This Warrant is a contract between the Company and the Holder and its terms shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed in the State of New York, without giving effect to any choice or conflict of law provision or rule of that or any other jurisdiction. The Company and each Holder irrevocably consent to the jurisdiction of the United States federal courts and the state courts located in New York City, in any suit or proceeding based on or arising under this Warrant and irrevocably agree that all claims in respect of such suit or proceeding may be determined in such courts. The Company and each Holder irrevocably waives the defense of an inconvenient forum to the maintenance of such suit or proceeding in such forum. The Company further agrees that service of process upon the Company mailed by first class mail shall be deemed in every respect effective service of process upon the Company in any such suit or proceeding. Nothing herein shall affect the right of any Holder to serve process in any other manner permitted by law. The Company agrees that a final non-appealable judgment in any such suit or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on such judgment or in any other lawful manner.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be deemed delivered the day after the date sent if sent by overnight courier, the same day sent if sent by facsimile transmission with confirmation of receipt by the Holder or three (3) days after deposit with the US Postal Service if sent via certified mail or first class mail if sent to the Holder at the address on the last date on which Holder communicated its contact information to the Company, or if sent by email effective on the date of the email, if a confirmation of email receipt is received by the Holder or if by the next Business Day, copy has been transmitted by any other approved method based.

i) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

j) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. Such successors or permitted assigns of the Holder shall be deemed to be the Holder for all purposes hereunder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares. Nothing herein, express or implied, is intended to or shall confer upon any other person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

k) Entire Agreement. This Warrant constitutes the sole and entire agreement of the parties to this Warrant with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

o) Waiver of Jury Trial. Each party acknowledges and agrees that any controversy which may arise under this Warrant is likely to involve complicated and difficult issues and, therefore, each such party irrevocably and unconditionally waives any right it may have to a trial by jury in respect of any legal action arising out of or relating to this Warrant or the transactions contemplated hereby.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the 22nd day of May, 2023.

RESPIRERX PHARMACEUTICALS INC.

By _____
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer,
Treasurer & Secretary

NOTICE OF EXERCISE

TO: RESPIRERX PHARMACEUTICALS, INC.

(1) The undersigned, pursuant to the provisions set forth in the attached Warrant No. _____, hereby irrevocably elects to purchase *(check applicable box)*:

- ☐ _____ shares of the Common Stock of RespireRx Pharmaceuticals, Inc. covered by such Warrant; or
- ☐ the maximum number of shares of Common Stock covered by such Warrant pursuant to the cashless exercise procedure set forth in Section 2(c), calculated as follows:
(insert calculation)

(2) The undersigned herewith makes payment of the full purchase price for such shares at the price per share provided for in such Warrant. Such payment takes the form of *(check applicable box or boxes)*:

- ☐ \$ _____ in lawful money of the United States; and/or
- ☐ if the provisions of Section 2(c) of this Warrant are in effect, the cancellation of such portion of the attached Warrant as is exercisable for a total of _____ Warrant Shares (using a Closing Price of \$ _____ per share for purposes of this calculation); and/or

(3) Please issue a certificate or certificates representing said Warrant Shares in the name of the undersigned or in such other name as is specified below:

(please print or type name and address)

(please insert social security or other identifying number)

The Warrant Shares shall be delivered to the following:

(please print or type name and address)

and if such number of shares of Common Stock shall not be all the shares evidenced by this Warrant Certificate, that a new Warrant for the balance of such shares be registered in the name of, and delivered to, Holder.

The Warrant Shares shall be delivered to the following DWAC Account Number or by physical delivery of a certificate to:

(4) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity:

Name of Authorized Signatory:

Title of Authorized Signatory:

Date: _____

ASSIGNMENT FORM

(To assign the foregoing warrant, execute
this form and supply required information.
Do not use this form to exercise the warrant.)

FOR VALUE RECEIVED, [] all of or [] shares of the foregoing Warrant and all rights evidenced thereby are
hereby assigned to

whose address is

Dated: ,

Holder’s Signature:

Holder’s Address:

Signature Guaranteed:

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

DEMAND PROMISSORY NOTE

\$25,000.00

May 22, 2023

FOR VALUE RECEIVED, **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (the “**Borrower**”), with a mailing address at 126 Valley Road, Suite C, Glen Rock, New Jersey 07452, hereby promises to pay *on demand* and to the order of the Marc M. Radin (the “**Lender**”), with an address of c/o Marc M. Radin PC, 126 Valley Road, Suite C, Glen Rock, NJ 07452, or at such other place as the holder hereof may designate in writing, the principal sum of twenty-five thousand dollars and no cents (\$25,000.00), together with interest thereon at the interest rate as set forth herein (the “**Loan**”). The Lender’s books and records as to amounts due under this Note shall be conclusive absent manifest error.

Principal and Interest. Principal and accrued interest thereon shall be immediately due and payable upon demand of the Lender. Interest shall accrue on the outstanding principal amount at a rate equal to 10% per annum. Interest shall be calculated on the basis of the actual number of days elapsed and a year of 365/366 days, as applicable. Any accrued but unpaid interest shall be added to the principal balance on the last day of each year that the principal is outstanding and unpaid.

Payments; Prepayments.

(a) Payment, when paid, shall be applied first to the payment of all interest accrued and unpaid on this Note and then to payment on account of the principal hereof.

(b) This Note may be prepaid in whole or in part at any time, without premium or penalty. Each prepayment must be accompanied by a written notice of such prepayment indicating the amount of such payment to be applied as a prepayment of principal.

Default. If the Borrower fails to make any payment when the same shall become due and payable, then the holder of this Note may declare the unpaid principal balance under this Note to be immediately due and payable and thereupon such balance shall become due and payable without presentation, protest or further demand or notice of any kind, all of which are hereby expressly waived, and the holder of this Note shall be entitled to receive, to the extent lawful, all costs, including reasonable attorney’s fees and expenses, for the collection of such amounts.

Time is of the Essence. *Time is of the essence with respect to each and every term and provision of this Note.*

Security Agreement.

(a) To secure its obligations under this Note and to induce the Lender to extend the Loan to the Borrower, the Borrower hereby grants, conveys and assigns to the Lender a security interest in and to, all of such Borrower’s right, title and interest in and to all of the following property, in all its forms, in each case whether now or hereafter existing, whether now owned or hereafter acquired, created or arising, and wherever located (collectively, but without duplication, the “**Collateral**”): all Equipment, Inventory and other Goods, Accounts, General Intangibles (including, without limitation, all of the Borrower’s patents and patent applications, trademarks and trademark applications, registered copyrights, domain names, and all licenses for the use of any patents, trademarks, copyrights and domain names of the Borrower), Fixtures, Documents, Letter-of-Credit Rights and Chattel Paper, Deposit Accounts, Instruments and Investment Property including equity interests in other companies, Commercial Tort Claims, Supporting Obligations, and all Proceeds of any and all of the foregoing (as all such capitalized terms used in this paragraph are as defined in the Uniform Commercial Code in effect in the State of Delaware); *provided, that* to the extent that any of the foregoing Collateral is subject, prior to the date hereof, to a security interest in favor of a third party and the agreement with such third party expressly prohibits any grant of a security interest therein, the Borrower will not be deemed to have a security interest in such Collateral only for so long as such prohibition continues. This Note shall constitute a security agreement for the purpose of granting to the Lender a security interest in the Collateral. The Borrower makes no representation to the Lender as to value of any Collateral or the priority of any lien on the Collateral which is granted hereby by the Borrower to the Lender in relation to any other liens on the Collateral which may exist of record as of the date hereof. By its acceptance of this Note, the Lender agrees hereby that to the extent that a prior security interest has been granted in and a lien exists on any of the Collateral pursuant to any other security agreement and perfected lien, the Lender shall have a lien which is subordinate to such prior lien of record.

(b) The Borrower hereby authorizes the Lender and appoints the Lender as its attorney-in-fact, to file in such office or offices as the Lender deems necessary or desirable, such financing and continuation statements and amendments and supplements thereto, and such other documents as the Lender may require to perfect, preserve and protect the security interests granted herein.

(c) The Borrower agrees that from time to time, at the expense of the Borrower, it will promptly execute and deliver all such further instruments and documents, and take all such further action as may be necessary or desirable, or as the Lender may reasonably request, in order to perfect and protect any security interest granted or purported to be granted hereby or to enable the Lender to exercise and enforce its rights and remedies hereunder and with respect to any Collateral or to otherwise carry out the purposes of this security agreement.

(d) The Borrower will, at its sole cost and expense, preserve and defend the Collateral, keep the Collateral in good condition at all times, and preserve the Collateral free and clear of all other liens and encumbrances, except liens existing prior to the effective date of this Loan or which the Lender has consented to and for taxes not yet due and payable. However, the foregoing will not prevent the Borrower from terminating its interest in and/or abandoning any Collateral if, in its reasonable discretion, such Collateral has no further value to the Borrower.

(e) The Borrower will not sell any Collateral outside the ordinary course of business without the prior written consent of the Lender, which consent shall not be unreasonably withheld, delayed or conditioned.

(f) The Borrower will keep itself and the Collateral insured against all hazards in such amounts as the Lender may reasonably require.

(g) Upon the occurrence and during the continuation of a default hereunder, the Lender may exercise, in addition to any other rights and remedies provided herein, under other contracts and under law, all the rights and remedies of a secured party under the Uniform Commercial Code.

Waiver. The Borrower hereby waives, unless otherwise provided for in this Note, demand, notice of presentment, protest, notice of dishonor and protest, rights of extension and any defense by reason of extension of time or other indulgences granted by the Lender.

Notices. Any notice, presentation or demand to or upon the Borrower in respect of this Note may be given or made by being mailed by registered or certified mail addressed to the Borrower at the address first written above or, if any other address shall at any time be designated for this purpose by the Borrower in writing to the holder of this Note at the time of such notice, to such other address. Notice shall be deemed received three (3) days after posting the same. Notice may also be given by hand-delivery, by facsimile transmission with confirmation of receipt or by email, effective on the date of the email, if a confirmation of email receipt is received by the Lender or if a copy has been transmitted by any other approved method.

Costs and Expenses.

(a) If the Lender retains the services of legal counsel in order to enforce any remedy available to the Lender under any document or instrument evidencing or securing the Loan, attorney's fees which are reasonable and actually incurred by the Lender shall be payable on demand by the Borrower to the Lender, and the Borrower shall also pay on demand the cost of any and all other costs reasonably incurred by the Lender in connection with proceedings to recover any sums due hereunder. Any such amounts not paid promptly on demand shall be added to the outstanding principal balance of this Note and shall bear interest at the stated interest rate of this Note until paid in full.

(b) Nothing contained herein shall limit or impair the obligation of the Borrower to pay any and all costs and expenses for which the Borrower is otherwise liable to the Lender as provided by law.

Miscellaneous.

(a) Any provision hereof found to be illegal, invalid or unenforceable for any reason whatsoever shall not affect the validity, legality or enforceability of the remaining provisions hereof.

(b) If the effective interest rate on this Note would otherwise violate any applicable usury law, then the interest rate shall be reduced to the maximum permissible rate retroactively to the original date of this Note, and any payment received by the holder in excess of the maximum permissible rate shall be treated as a prepayment of the principal of this Note.

(c) This Note shall inure to the benefit of the Lender and its heirs, estate, personal representatives and legal guardians, endorsees and assigns. This Note may not be assigned by either the Borrower or the Lender without the prior written consent of the other party.

(d) The descriptive headings of this Note are inserted for convenience only and shall not affect the meaning or construction of any of the provisions of this Note.

(e) The terms of this Note may be amended and any rights of the Lender hereunder may be waived only if such amendment or waiver is in writing and is signed by the Lender and the Borrower.

Governing Law. The validity, construction and enforceability of this Note shall be construed in accordance with and governed by the laws of the State of Delaware, excluding rules relating to conflicts of law.

This Note has been duly executed by the Borrower and constitutes a legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms. All covenants and promises in this Note shall bind the successors and permitted assigns of the Borrower.

[Signature Page Follows]

IN WITNESS WHEREOF, the Borrower has duly executed this Demand Promissory Note effective as of the day and year first above written.

RESPIRERX PHARMACEUTICALS INC.

By: /s/ Jeff Eliot Margolis
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer,
Secretary

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAW, AND NO INTEREST HEREIN OR THEREIN MAY BE SOLD, DISTRIBUTED, ASSIGNED, OFFERED, PLEDGED OR OTHERWISE TRANSFERRED UNLESS (A) THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT AND APPLICABLE STATE SECURITIES LAWS COVERING ANY SUCH TRANSACTION, (B) THE COMPANY RECEIVES AN OPINION OF COUNSEL FOR THE HOLDER OF SUCH SECURITIES (CONCURRED IN BY COUNSEL FOR THE COMPANY) THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION, OR (C) THE COMPANY OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE COMMON STOCK

RESPIRERX PHARMACEUTICALS INC.

Warrant Number: DPN-002

Initial Exercise Date: May 22, 2023

THIS COMMON STOCK PURCHASE WARRANT (the “Warrant”) certifies that, for value received, Marc M. Radin (the “Holder”) is entitled, upon the terms and conditions hereof, and subject to the limitations on exercise hereinafter set forth, at any time on or after the date hereof (the “Initial Exercise Date”) and on or prior to the 5:00 p.m. New York time, on the date that is 5 years from the initial exercise date (the “Termination Date”) but not thereafter, to subscribe for and purchase from RespireRx Pharmaceuticals Inc., up to 8,333,333 shares (as subject to adjustment hereunder, the “Warrant Shares”) of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Demand Promissory Note and Warrant Purchase Agreement dated on May 22, 2023 (the “SPA”), among the Company and the Investor. This is the warrant referred to in Section 1.(a) of the SPA.

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on any Business Day on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy of the Notice of Exercise form annexed hereto. Within three (3) Business Days, as defined below, following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer in immediately available funds or cashier’s check drawn on a United States bank in immediately available funds unless the exercise is a cashless exercise, in which case no funds would due and payable. A “Business Day” means any day other than a Saturday or Sunday or any day that national commercial banks in New York City, New York are authorized or required to close or any day that the NASDAQ stock markets or any other nationally recognized stock markets are closed. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Business Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Company, either directly or through its representative, shall maintain or cause to be maintained, records showing the number of Warrant Shares purchased and the date of such purchases, which records shall be deemed to be accurate absent manifest error. The Company shall deliver any objection to any Notice of Exercise Form within two (2) Business Days of actual receipt of such notice. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares available for purchase hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$0.0015 per share, subject to adjustment hereunder (the “Exercise Price”).

c) Cashless Exercise. This Warrant may be exercised at any time otherwise permitted by means of a “cashless exercise” in which the Holder shall be entitled to receive a certificate for the number of Warrant Shares equal to the quotient obtained by the following formula:

$$\frac{(A-B) \times (X)}{(A)}$$

Where:

(A) = the Closing Price on the Trading Day immediately preceding the date of such election (“Trading Day” means any Business Day, or, if the Common Stock of the Company is traded on an exchange, the OTC Pink Market or any other OTC market or other quotation system, then any Business Day on which such exchange, the OTC Pink Market or any OTC market or quotation system is open for trading the Common Stock of the Company);

(B) = the Exercise Price of this Warrant, as adjusted; and

(X) = the number of Warrant Shares issuable upon exercise of this Warrant in accordance with the terms of this Warrant by means of a cash exercise rather than a cashless exercise.

As used herein, “Closing Price”, shall mean the first of the following clauses that applies: (1) if, at the time of any such calculation, the Common Stock is listed or quoted on the NYSE MKT, or the New York Stock Exchange, or the NASDAQ Global Market, the NASDAQ Global Select Market, the NASDAQ Capital Market or any other U.S. national exchange, the Closing Price shall be the closing or last sale price reported for the last business day immediately preceding the date of any such calculation; (2) if, at the time of any such calculation, the Common Stock is quoted on the OTC Pink Market or any other OTC market published by the National Quotation Bureau Inc. or a similar agency or organization succeeding to its function or reporting prices, the Closing Price shall be the average of the closing prices reported for the last five (5) days during which the Common Stock actually traded and for which a closing price is available immediately preceding the date of any such calculation, or (3) in all other cases, the Closing Price of a share of Common Stock shall be the price determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company.

d) Mechanics of Exercise.

i. Delivery of Certificates Upon Exercise. Certificates for shares issuable upon the exercise hereof shall be transmitted by the transfer agent of the Company to the Holder by crediting the account of the Holder’s broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission (“DWAC”) system if the Company is a participant in such system and such shares are eligible for legend removal or such other book-entry or electronic delivery system agreed by Holder and the Company, or otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise on the date that is no more than five (5) Business Days after the latest of (A) the delivery to the Company of the Notice of Exercise, (B) surrender of this Warrant (if required), and (C) any required payment of the aggregate Exercise Price as set forth above (such date, the “Warrant Share Delivery Date”). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the latter of the date the Warrant has been exercised and any required payment to the Company of the Exercise Price has been made in good funds by either certified check, wire transfer or other similar payment method and all taxes required to be paid by the Holder as set forth in Section 2(a) above, if any, pursuant to Section 2(d)(v) prior to the issuance of such shares, having been paid.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to transmit or to cause the transfer agent of the Company to transmit to the Holder a certificate or the certificates representing the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

v. Charges, Taxes and Expenses. Issuance of certificates for Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event certificates for Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto (the "Assignment Form") duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

vi. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

vii. Acquisitions. If at any time while this Warrant is outstanding there is an Acquisition (as defined below), then the Holder shall receive from any surviving entity or successor to the Company, in exchange for this Warrant, a new warrant in the surviving entity or successor to the Company substantially in the form of this Warrant and with an exercise price adjusted to reflect the Common Stock equivalent price offered in the Acquisition. An "Acquisition" shall mean the closing of a merger, share exchange, consolidation, acquisition of all or substantially all of the assets or stock, reorganization or liquidation of the Company that results in the stockholders of the Company immediately prior to such transaction owning less than 50% of the voting capital stock of the Company (or its successor or parent corporation) immediately after the transaction or, in the case of a sale of assets or liquidation, the Company owning after the transaction less than substantially all of the assets owned by the Company prior to the transaction (other than an issuance of equity securities for the primary purpose of raising capital) or any other event that constitutes a "Capital Change" under the Company's Second Restated Certificate of Incorporation, as it may be amended, restated or otherwise modified from time to time. The Holder shall execute all documentation required to be executed by the Company or the acquirer or successor of the Company in connection with the Acquisition, including, without limitation, escrow, indemnification and other similar agreements. Subject to and to the extent permitted by applicable law, the Company will endeavor to notify the Holder of any proposed Acquisition at least 30 days prior to the date of any Acquisition (or such shorter period as reasonably practicable under the circumstances); provided that the failure to so notify the Holder shall not in any way impair the Acquisition.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant and which shall not include any dividends paid-in-kind in respect to any series of convertible preferred stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

b) Calculations. All calculations under this Section 3 shall be made to the nearest 1/100th of a cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

c) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to this Section 3, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (B) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, or (C) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, any of the events in Section 3.(c)ii (A), (B) or (C) being an “Event”, then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register of the Company, at least ten (10) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such Event is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such Event; provided that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the Event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with an Assignment Form duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall, either directly or through its representative, record or cause to be recorded, this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time, which Warrant Register shall be deemed to be accurate absent manifest error. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant satisfy any other reasonable conditions established by the Company, including without limitation, a legal opinion reasonably acceptable to the Company with respect to such transfer.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act. The Holder acknowledges that the Warrant Shares will not be registered under the Securities Act of 1933, as amended, or any applicable statute or foreign securities law, and will therefore not be freely transferable.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i).

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the trading market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, 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 Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or reasonably appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or reasonably appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. This Warrant is a contract between the Company and the Holder and its terms shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed in the State of New York, without giving effect to any choice or conflict of law provision or rule of that or any other jurisdiction. The Company and each Holder irrevocably consent to the jurisdiction of the United States federal courts and the state courts located in New York City, in any suit or proceeding based on or arising under this Warrant and irrevocably agree that all claims in respect of such suit or proceeding may be determined in such courts. The Company and each Holder irrevocably waives the defense of an inconvenient forum to the maintenance of such suit or proceeding in such forum. The Company further agrees that service of process upon the Company mailed by first class mail shall be deemed in every respect effective service of process upon the Company in any such suit or proceeding. Nothing herein shall affect the right of any Holder to serve process in any other manner permitted by law. The Company agrees that a final non-appealable judgment in any such suit or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on such judgment or in any other lawful manner.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be deemed delivered the day after the date sent if sent by overnight courier, the same day sent if sent by facsimile transmission with confirmation of receipt by the Holder or three (3) days after deposit with the US Postal Service if sent via certified mail or first class mail if sent to the Holder at the address on the last date on which Holder communicated its contact information to the Company, or if sent by email effective on the date of the email, if a confirmation of email receipt is received by the Holder or if by the next Business Day, copy has been transmitted by any other approved method based.

i) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

j) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. Such successors or permitted assigns of the Holder shall be deemed to be the Holder for all purposes hereunder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares. Nothing herein, express or implied, is intended to or shall confer upon any other person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

k) Entire Agreement. This Warrant constitutes the sole and entire agreement of the parties to this Warrant with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

o) Waiver of Jury Trial. Each party acknowledges and agrees that any controversy which may arise under this Warrant is likely to involve complicated and difficult issues and, therefore, each such party irrevocably and unconditionally waives any right it may have to a trial by jury in respect of any legal action arising out of or relating to this Warrant or the transactions contemplated hereby.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the 22nd day of May, 2023.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the 22nd day of May, 2023.

RESPIRERX PHARMACEUTICALS INC.

By /s/ Jeff Eliot Margolis
Name: Jeff Eliot Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer &
 Secretary

NOTICE OF EXERCISE

TO: RESPIRERX PHARMACEUTICALS, INC.

(1) The undersigned, pursuant to the provisions set forth in the attached Warrant No. _____, hereby irrevocably elects to purchase *(check applicable box)*:

☐ _____ shares of the Common Stock of RespireRx Pharmaceuticals, Inc. covered by such Warrant; or

☐ the maximum number of shares of Common Stock covered by such Warrant pursuant to the cashless exercise procedure set forth in Section 2(c), calculated as follows:
(insert calculation)

(2) The undersigned herewith makes payment of the full purchase price for such shares at the price per share provided for in such Warrant. Such payment takes the form of *(check applicable box or boxes)*:

☐ \$ _____ in lawful money of the United States; and/or

☐ if the provisions of Section 2(c) of this Warrant are in effect, the cancellation of such portion of the attached Warrant as is exercisable for a total of _____ Warrant Shares (using a Closing Price of \$ _____ per share for purposes of this calculation); and/or

(3) Please issue a certificate or certificates representing said Warrant Shares in the name of the undersigned or in such other name as is specified below:

(please print or type name and address)

(please insert social security or other identifying number)

The Warrant Shares shall be delivered to the following:

(please print or type name and address)

and if such number of shares of Common Stock shall not be all the shares evidenced by this Warrant Certificate, that a new Warrant for the balance of such shares be registered in the name of, and delivered to, Holder.

The Warrant Shares shall be delivered to the following DWAC Account Number or by physical delivery of a certificate to:

(4) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity:

Name of Authorized Signatory:

Title of Authorized Signatory:

Date: _____

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to exercise the warrant.)

FOR VALUE RECEIVED, [] all of or [] shares of the foregoing Warrant and all rights evidenced thereby are hereby assigned to

whose address is
.

Dated: ,

Holder’s Signature:

Holder’s Address:

Signature Guaranteed:

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.



ResolutionRx Ltd, a Subsidiary of RespireRx Pharmaceuticals Inc., Enters into Letter of Intent with Cantheon Capital for the Financing of Anticipated Research and Development Costs

Glen Rock, N.J., May 24, 2023/Globe Newswire – RespireRx Pharmaceuticals Inc. (OTC Pink Market: RSPI) (“RespireRx”) and ResolutionRx Ltd (“ResolutionRx”), collectively “RespireRx” and its subsidiaries and business units are referred to in this press release as the “Company.” ResolutionRx, an unlisted public Australian company, (Australian Company Number or ACN: 664 925 651) and a wholly-owned subsidiary of RespireRx, and RespireRx are pleased to jointly announce that on May 18, 2023, ResolutionRx entered into a Letter of Intent (the “Cantheon LOI” or “Cantheon Term Sheet”) with Cantheon Capital (“Cantheon”) that describes an intended aggregate investment of US\$3,125,000 by Cantheon in Australian Series A Preference Shares (the “Series A Shares”) to be issued by ResolutionRx to support clinical trial research and development (“R&D”) over the R&D period, with each tranche of the investment equal to 25% of the clinical trial costs of the cannabinoid program that are described in the the ResolutionRx clinical research services (“CRO”) agreement with iNGENU and the subject of ResolutionRx approved invoices received from iNGENU.

The terms of the Cantheon LOI are binding, subject only to, (i) satisfactory completion of definitive documents substantially consistent with the terms of the Cantheon Term Sheet, (ii) satisfactory completion of due diligence, (iii) the previously announced iNGENU services agreement being valid and enforceable by all parties, and (iv) the development and commercialization rights to the RespireRx cannabinoid program have been sub-licensed, licensed, assigned, transferred or otherwise made available to ResolutionRx.

The Series A Shares are convertible, and upon conversion, shall at all times be paid with Ordinary Shares and not in cash. The Series A Shares are subject to a mandatory and automatic conversion feature which is generally triggered the day before the consummation of an initial public offering (“IPO”) by ResolutionRx, or after certain timeframes have occurred or upon the occurrence of certain corporate events.

In the Cantheon LOI, ResolutionRx represented that it will incur R&D costs of approximately US\$16,530,571 during the performance of R&D which is expected to occur over approximately two and a half years. ResolutionRx also represented that it will reasonably endeavor to ensure that the Ordinary Shares will be listed for trading on the Australian Securities Exchange (“ASX”) within eighteen months of the anniversary date of the services agreement with iNGENU. Such listing will be either by IPO, backdoor (shell merger) or direct listing or another mutually agreed method.

The Cantheon investment will be exempt from registration under the applicable U.S. federal and state securities laws, rules and regulations. Cantheon also acknowledged that ResolutionRx will be conducting additional financings, including but not limited to additional offerings of Series A Shares in Australia as well as other forms of financing.

RespireRx Pharmaceuticals, Inc. 126 Valley Road, Suite C, Glen Rock, NJ 07452
www.respirerx.com

“This Cantheon Term Sheet, along with our Letter of Intent and Term Sheet with Radium Capital, our services agreement with our CRO iNGENu, our recently established relationships with our Australian based research and development tax credit advisors and accounting firm and our Australian based law firm, our commercial bank and our new relationship (as of May 22, 2023) with our local Australian financial advisor, PrimaryMarkets Pty Ltd, as well as the restatement of our Australian Constitution to, among other things, establish the Series A Shares, we believe completes the major initial components of our plan to create a fully operational cannabinoid drug research and development company in Australia that will have adequate capital to conduct its strategic and operational plans,” said Jeff Margolis, Senior Financial Officer, ResolutionRx and Chief Financial Officer of RespireRx.

“This financing is a crucial next step in the restructuring of RespireRx and the founding and funding of ResolutionRx. Combined with the previously announced debt facility similar to a line of credit to be provided by Radium Capital to finance ResolutionRx’s anticipated 43.5% tax credit under the Australian Research and Development Tax Incentive, the Cantheon financing will provide a significant amount of the funds needed in order for ResolutionRx to conduct the upcoming research and development activities necessary for the commercialization of its pharmaceutical cannabinoid platform,” said Arnold Lippa, Interim CEO and CSO of RespireRx.

The above is a summary of what RespireRx and ResolutionRx believe are key the provisions of the Cantheon LOI and is qualified in its entirety by RespireRx’s Current Report on Form 8-K filed with the U.S. Securities and Commission on May 24, 2023.

About RespireRx Pharmaceuticals Inc.

RespireRx Pharmaceuticals Inc. and its subsidiaries and business units (“RespireRx Group”) are leaders in the discovery and development of medicines for the treatment of psychiatric and neurological disorders, with a focus on treatments that address conditions affecting millions of people, but for which there are few or poor treatment options, including obstructive sleep apnea (“OSA”), attention deficit hyperactivity disorder (“ADHD”), epilepsy, pain, recovery from spinal cord injury (“SCI”), and certain neurological orphan diseases . The Company is developing a pipeline of new and re-purposed drug products based on our broad patent portfolios for two drug platforms: (i) pharmaceutical cannabinoids, which include dronabinol, a synthetic form of Δ9-tetrahydrocannabinol (“Δ9-THC”) that acts upon the nervous system’s endogenous cannabinoid receptors and (ii) neuromodulators, which include AMPAkines and GABAKines, proprietary chemical entities that positively modulate (positive allosteric modulators or “PAMs”) AMPA-type glutamate receptors and GABA_A receptors, respectively.

The Company holds exclusive licenses and owns patents and patent applications or rights thereto for certain families of chemical compounds that claim the chemical structures and their uses in the treatment of a variety of disorders, as well as claims for novel uses of known drugs.

ResolutionRx: Pharmaceutical Cannabinoids.

ResolutionRx Ltd (Australian Company Number a/k/a ACN 664 925 651) was formed in Australia on 11th January 2023 by RespireRx as an unlisted public company. RespireRx intends to contribute, sub-license, assign or otherwise make available to ResolutionRx, its cannabinoid drug development program subject to certain liabilities. ResolutionRx would then engage in the R&D associated with that program, initially for the development of a new formulation of dronabinol for use in a Phase 3 clinical trial and the filing of regulatory approval for the treatment of obstructive sleep apnea (“OSA”). The current total budget for that program over the next several years is approximately US\$16.5 million, most, but not all of which is expected to be eligible for the R&D tax refund. Dronabinol, a synthetic version of Δ-9-THC, a naturally occurring substance in the cannabis plant, has already demonstrated significant improvement in the symptoms of OSA in two Phase 2 clinical trials. OSA is a serious respiratory disorder that impacts an estimated 29.4 million people in the United States and that has been linked to increased risk for hypertension, heart failure, depression, and diabetes. There are no approved drug treatments for OSA.

RespireRx Pharmaceuticals, Inc. 126 Valley Road, Suite C, Glen Rock, NJ 07452
www.respirerx.com

Because dronabinol is already FDA approved for the treatment of AIDS related anorexia and chemotherapy induced nausea and vomiting, the Company further believes that its re-purposing strategy would only require approval by the FDA of a 505(b)(2) new drug application (“NDA”), an efficient regulatory pathway that allows the use of publicly available data.

EndeavourRx: Neuromodulators

GABAkines. Under a License Agreement with the University of Wisconsin-Milwaukee Research Foundation, Inc. (“UWMRF”) and on behalf of its EndeavourRx business unit, the Company has licensed rights to certain selectively acting GABAkin

es because of their ability to selectively amplify inhibitory neurotransmission at a highly specific, subset of GABA_A receptors, thus producing a unique efficacy profile with reduced side effects. Preclinical studies have documented their efficacy in a broad array of animal models of interrelated neurological and psychiatric disorders including epilepsy, pain, anxiety, and depression in the absence of or with greatly reduced propensity to produce sedation, motor-impairment, tolerance, dependence and abuse. The Company currently is focusing on developing KRM-II-81 for the treatment of epilepsy and pain.

KRM-II-81 has displayed a high degree of anti-convulsant activity in a broad range of preclinical studies, including in treatment resistant and pharmaco-resistant models. Not only was KRM-II-81 highly effective in these models, but pharmaco-resistance or tolerance did not develop to its anti-convulsant properties. These latter results are particularly important because pharmaco-resistance occurs when medications that once controlled seizures lose efficacy as a result of chronic use and it is a principal reason some epileptic patients require brain surgery to control their seizures. In support of its potential clinical efficacy, translational studies have demonstrated the ability of KRM-II-81 to dramatically reduce epileptiform electrical activity when administered in situ to brain slices excised from treatment resistant epileptic patients undergoing surgery.

In addition, KRM-II-81 has displayed a high degree of analgesic activity in a broad range of preclinical studies. In intact animal models of pain, the analgesic efficacy of KRM-II-81 was comparable to or greater than commonly used analgesics. At the same time, KRM-II-81 did not display side effects such as sedation and motor impairment, but even more importantly, it did not produce tolerance, dependence, respiratory depression or behavioral changes indicative of abuse liability, which are produced by opioid narcotics and are at the heart of the opioid epidemic.

AMPAkines. Through an extensive translational research effort from the cellular level through Phase 2 clinical trials, the Company has developed a family of novel, low impact AMPAkin

es, including CX717, CX1739 and CX1942 that may have clinical application in the treatment of CNS-driven neurobehavioral and cognitive disorders, spinal cord injury, neurological diseases, and certain orphan indications. Our lead clinical compounds, CX717 and CX1739, have successfully completed multiple Phase 1 safety trials. Both compounds have also completed Phase 2 proof of concept trials demonstrating target engagement, by antagonizing the ability of opioids to induce respiratory depression.

AMPAkin

es have demonstrated positive activity in animal models of ADHD, results that have been extended translationally into statistically significant improvement of symptoms observed in a Phase 2 human clinical trial of CX717 in adult patients with ADHD. Statistically significant therapeutic effects were observed within one week. We believe AMPAkin

es may represent a novel, non-stimulant treatment for ADHD with a more rapid onset of action than alternative non stimulants, such as Strattera[®] (atomoxetine), and without the drawbacks of amphetamine-type stimulants.

In a series of important studies funded by grants from the National Institutes of Health and published in a number of peer reviewed articles, Dr. David Fuller (University of Florida), a long-time RespireRx collaborator, has demonstrated the ability of CX1739 and CX717, the Company’s lead AMPAkin

es, to improve motor nerve activity and muscle function in a number of animal models of spinal cord injury (SCI).

Additional information about RespireRx and the matters discussed herein can be obtained on the RespireRx web-site at www.RespireRx.com or RespireRx's filings with the U.S. Securities and Exchange Commission (the "SEC") at www.sec.gov. Additional information about ResolutionRx and the matters discussed herein can be obtained on the ResolutionRx website at <https://www.resolutionrx.com.au>.

Not a Securities Offering or Solicitation

This communication shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sales of securities in any jurisdiction in which such offer, solicitation or sale of securities would be unlawful before registration or qualification under the laws of such jurisdiction.

Cautionary Note Regarding Forward-Looking Statements

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Company intends that such forward-looking statements be subject to the safe harbor created thereby. These might include statements regarding the Company's future plans, targets, estimates, assumptions, financial position, business strategy and other plans and objectives for future operations, and assumptions and predictions about research and development efforts, including, but not limited to, preclinical and clinical research design, execution, timing, costs and results, future product demand, supply, manufacturing, costs, marketing and pricing factors.

In some cases, forward-looking statements may be identified by words including "assumes," "could," "ongoing," "potential," "predicts," "projects," "should," "will," "would," "anticipates," "believes," "intends," "estimates," "expects," "plans," "contemplates," "targets," "continues," "budgets," "may," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words, and such statements may include, but are not limited to, statements regarding (i) future research plans, expenditures and results, (ii) potential collaborative arrangements, (iii) the potential utility of the Company's product candidates, (iv) reorganization plans, and (v) the need for, and availability of, additional financing. Forward-looking statements are based on information available at the time the statements are made and involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance or achievements to be materially different from the information expressed or implied by the forward-looking statements in this press release.

These factors include but are not limited to, regulatory policies or changes thereto, available cash, research and development results, issuance of patents, competition from other similar businesses, interest of third parties in collaborations with us, and market and general economic factors, and other risk factors disclosed in "Item 1A. Risk Factors" in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, as filed with the SEC on April 17, 2023 (the "2022 Form 10-K").

You should read these risk factors and the other cautionary statements made in the Company's filings as being applicable to all related forward-looking statements wherever they appear in this press release. We cannot assure you that the forward-looking statements in this press release will prove to be accurate and therefore prospective investors, as well as potential collaborators and other potential stakeholders, are encouraged not to place undue reliance on forward-looking statements. You should read this press release completely. Other than as required by law, we undertake no obligation to update or revise these forward-looking statements, even though our situation may change in the future.

RespireRx Pharmaceuticals, Inc. 126 Valley Road, Suite C, Glen Rock, NJ 07452
www.respirerx.com

We caution investors, as well as potential collaborators and other potential stakeholders, not to place undue reliance on any forward-looking statement that speaks only as of the date made and to recognize that forward-looking statements are predictions of future results, which may not occur as anticipated. Actual results could differ materially from those anticipated in the forward-looking statements and from historical results, due to the risks and uncertainties described in the 2022 Form 10-K, in our quarterly reports on Form 10-Q and in this press release, as well as others that we may consider immaterial or do not anticipate at this time. These forward-looking statements are based on assumptions regarding the Company's business and technology, which involve judgments with respect to, among other things, future scientific, economic, regulatory and competitive conditions, collaborations with third parties, and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the Company's control. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we do not know whether our expectations will prove correct. Our expectations reflected in our forward-looking statements can be affected by inaccurate assumptions that we might make or by known or unknown risks and uncertainties, including those described in the 2022 Form 10-K, in our quarterly reports on Form 10-Q and in this press release. These risks and uncertainties are not exclusive and further information concerning us and our business, including factors that potentially could materially affect our financial results or condition, may emerge from time to time.

For more information about the risks and uncertainties the Company faces, see "Item 1A. Risk Factors" in our 2022 Form 10-K. Forward-looking statements speak only as of the date they are made. The Company does not undertake and specifically declines any obligation to update any forward-looking statements or to publicly announce the results of any revisions to any statements to reflect new information or future events or developments. We advise investors, as well as potential collaborators and other potential stakeholders, to consult any further disclosures we may make on related subjects in our annual reports on Form 10-K and other reports that we file with or furnish to the SEC including but not limited to our most recent Form 10-Q as of March 31, 2023 filed with the SEC on May 22, 2023.

Company Contact:

Jeff Margolis
Senior Vice President, Chief Financial Officer, Treasurer and Secretary
Telephone: 917-834-7206
Email: jmargolis@respirerx.com
RespireRx Pharmaceuticals Inc.
126 Valley Road, Suite C
Glen Rock, NJ 07452
www.respirerx.com

RespireRx Pharmaceuticals, Inc. 126 Valley Road, Suite C, Glen Rock, NJ 07452
www.respirerx.com



Letter of Intent (LOI) – ResolutionRx Inc.

Private & Confidential

This LOI summarizes the principal terms of the proposed equity financing by Cantheon Capital, LLC (the “**Investor**” or “**Cantheon**”) through a private placement for ResolutionRx Ltd (the “**Company**” or “**ResolutionRx**”), an Australian unlisted public company with the intent to list on the Australian Securities Exchange (“ASX”), NASDAQ Capital Market, or any market equal to or higher than the OTCQB marketplace within eighteen months of the anniversary date of the services agreement (“Services Agreement”) with iNGENU CRO Pty Ltd (“iNGENU”) and ResolutionRx. At the date of this LOI, ResolutionRx is a wholly-owned subsidiary of RespireRx Pharmaceuticals Inc., a Delaware corporation (“**RespireRx**”).

The Cantheon investment will be a United States private placement, exempt from registration under the securities laws, rules and regulations of the United States (“US”) and the various states of the US which will be undertaken by ResolutionRx with the intention of being part of, but not be limited to a larger financing of Series A Shares (defined below) and other financings.

The Total Fundraising will include funds for corporate expenses in addition to R&D, but Cantheon’s investment will be exclusively limited to 25% of the Australian clinical trial budget as elucidated in ResolutionRx approved invoices from iNGENU. Cantheon will fund by payment directly to iNGENU on ResolutionRx’s behalf, 25% of the approved clinical trial invoices rendered by iNGENU to ResolutionRx.

The terms of this term sheet (“**Term Sheet**”) are binding, subject only to, (i) satisfactory completion of definitive documents substantially consistent with the terms of this Term Sheet, (ii) satisfactory completion of due diligence, (iii) the iNGENU services agreement is valid and enforceable by all parties and (iv) the development and commercialization rights to the RespireRx cannabinoid program have been sub-licensed, licensed, assigned, transferred or otherwise made available to ResolutionRx.

Terms		
1.	Issuer	ResolutionRx Ltd ACN 664 925 651 (“ Company ”)
2.	Amount of Investment	US\$3,125,000 (which investment may be in either US dollars or the Australian dollar equivalent). Investment shall be in the form of purchase of Series A Shares as defined below and shall be made by direct payment to iNGENU on ResolutionRx’s behalf, upon presentation of approved invoices rendered by iNGENU to ResolutionRx, all committed at the same price, each to be funded in an amount equal to 25% of the iNGENU invoice amount for clinical trials.
3.	Payment upon Presentation of Approved invoice	By direct payment to iNGENU on ResolutionRx’s behalf, upon presentation of approved invoices rendered by iNGENU.
4.	Issuance Price – 90% of the lower of the valuation in the independent valuation report ordered by RespireRx or US\$25 million	The issuance price shall be US\$0.90 per Series A Share (assumes 90% of a US\$25 mm independent valuation and is subject to adjustment downward, but not upward, based upon the result of the independent valuation). This represents 3,472,222 preference shares. Ordinary share equivalent per share pricing is US\$.90.

5.	Securities Purchased	<p>ResolutionRx Series A Preference Shares (“Series A Shares”) the Certificate of Designation of Series A Preference Shares may be viewed at the following link as Schedule I to Exhibit 99.1 of the RespireRx Current Report on Form 8-K, filed with the US Securities and Exchange Commisson on May 5, 2023: https://www.sec.gov/Archives/edgar/data/849636/000149315223015589/ex99-1.htm).</p> <p>Investor shall represent that it is an accredited investor as defined in Rule 501 of the Securities Act of 1933, as amended.</p>
6.	Origination Fee and Conversion	<p>Origination Fee: 1% paid in Series A Shares.</p> <p>Conversion: Conversion shall at all times be paid with Ordinary Shares and not in cash. The Preference Shares are subject to a mandatory and automatic conversion the day before the IPO, or if an IPO has not occurred within eighteen months of the anniversary date of the services agreement with iNGENu, on the third anniversary or upon the occurrence of certain corporate events, such as, but not limited to a merger with or acquisition by another entity, sale of control of ResolutionRx or sale of substantially all of the assets of the Company.</p>
7.	Listing	<p>ResolutionRx will represent that it will reasonably endeavour to ensure that the Ordinary Shares will be listed for trading on the ASX within eighteen months of the anniversary date of the services agreement with iNGENu. Such listing will be either by IPO, backdoor (shell merger) or direct listing or another mutually agreed method.</p> <p>Cantheon shall cooperate in good faith and provide reasonable assistance to achieve the IPO.</p>
8.	Use of Proceeds	<p>The Company shall use the proceeds from this financing from Cantheon to fund clinical trials.</p>
9.	Condition	<p>ResolutionRx estimates that it will incur approximately US\$16,530,571 during the performance of the R&D.</p> <p>Cantheon Capital agrees to purchase Series A Shares in the US exempt private placement in tranches corresponding to the approved invoice amounts (as defined in the definitive documents) by iNGENu for clinical trials totaling US\$ 3,125,000 over the life of the R&D program, estimated to be approximately two and a half years. Cantheon shall have weighted average anti-dilution provisions.</p>
10.	Capitalization Table	<p>See Exhibit A to this Term Sheet.</p>

OTHER TERMS		
11.	Confidentiality	This LOI and its contents are intended for the exclusive use of the Investor and shall not be disclosed by the Investor to any person other than the Investor’s legal and financial advisors, a shareholder or member of the Investor or any of the Investor’s officers, directors and employees for the purposes of the proposed transaction unless the prior written consent of ResolutionRx is obtained. To the extent public disclosure of this LOI is required or deemed advisable by ResolutionRx or RespireRx counsel, ResolutionRx and/or RespireRx shall have the right to make such disclosure either directly or via RespireRx or both. To the extent public disclosure is not required, but deemed desirable by ResolutionRx, the Company shall provide Investor with a draft of such disclosure for Investor’s approval which shall not be unreasonably withheld.
12.	Brokers	Investor and ResolutionRx represent that no brokers or agents were involved in the origination or consummation of the transaction contemplated in this Term Sheet and that the 1% equity origination fee is payable in Series A Shares only to Cantheon.
13.	Governing Laws	This LOI, and all related agreements will be governed by and interpreted in accordance with the laws of the State of Delaware and the federal laws of the United States applicable therein.
14.	Private Placement	The equity financing will be conducted as a private placement, exempt from registration and only to accredited investors pursuant to the laws, rules and regulations of the US and the states therein. To the extent an analogous private placement is conducted in Australia and the states therein, the Australian offering shall be conducted in a manner that provides for exemption from registration under and compliance with Australian laws, rules and regulations.
15.	Post-Closing Actions	ResolutionRx and/or RespireRx will continue equity raises for the foreseeable future. ResolutionRx, RespireRx and Cantheon shall publicly announce the completion of the first tranche that will disclose the terms of the definitive agreement(s) and, as may be required or advisable, each tranche thereafter.

ResolutionRx Ltd	Cantheon Capital, LLC
By: <u> /s/ Jeff Eliot Margolis </u>	By: <u> /s/ William F. Cronin </u>
Name: Jeff Eliot Margolis	Name: William (Bill) Cronin
Office or Title: Senior Financial Officer	Office or Title: Partner

EXHIBIT A

	Ordinary Shares	Series A Preference Shares*
Shareholder		
RespireRx	25,000,000	0
US Private Offer	0	3,472,222
US Private Offer Equity Origination Fee]	0	34,722
Investors in the Offering (maximum)	0	13,333,332
Total	25,000,000	16,840,276
Total assuming full conversion of Series A Preference Shares	41,840,276	0
*Each Series A Preference Share will convert into one Ordinary Share, subject to any adjustment permitted under the terms of issue of the Series A Preference Shares.		



PrimaryMarkets Pty Limited
ABN 24 136 368 244
Level 6, 56 Pitt Street
Sydney NSW 2000
PO Box R697 Royal Exchange
Sydney South NSW 1225
t. +61 2 9993 4475
f. +61 2 9993 4433

Corporate Authorised Representative AFSL 485946

e. info@primarymarkets.com
www.primarymarkets.com

22 May 2023

STRICTLY PRIVATE & CONFIDENTIAL

Mr Jeff Margolis
Chief Financial Officer
ResolutionRx Ltd
Registered office c/- Bentleys (SA) Pty Ltd
Level 5
63 Pirie Street
Adelaide SA 5000

CAPITAL RAISING MANDATE

Dear Jeff,

Further to our discussions, PrimaryMarkets Pty Limited (**PrimaryMarkets**) is pleased to set out in this letter (**Mandate**) our proposal to be appointed as non-exclusive advisor to undertake a fund raising for ResolutionRx Ltd (**Company**).

We offer companies a dedicated online Platform where current and prospective investors can be made aware of your Company and your current capital raising opportunity. PrimaryMarkets aims to raise capital via our Platform and our global 110,000 + investor network.

PrimaryMarkets is keen to work with the Company to provide the services and would be pleased to be mandated as outlined in this Mandate.

PrimaryMarkets provides a secure and controlled online Platform which has the following features:

- Dedicated Company Capital Raising Page: The Company will have a dedicated portal to provide information and data which includes e.g. company information, history, product offerings, announcements, investor presentations, financial reports, research notes and videos etc.
- Featured Offering: we will promote the Company raising as a Featured Listing on our Platform.
- Marketing Communication: PrimaryMarkets will push communications out to its 110,000+ global Investor Network via regular eDMs (generally distributed twice weekly) as well as the Company being prominently positioned on the PrimaryMarkets Platform.
- Targeted Investors: We can create specific campaigns accessing PrimaryMarkets' institutional, accredited, wholesale and professional global/local Investor Network.
- Dedicated Customer Support: Online assistance from our dedicated client managers to help facilitate the capital raising.



About PrimaryMarkets

Since launching in 2016, PrimaryMarkets has listed over 385 opportunities totalling over \$2B in value.

In addition to Capital Raising, PrimaryMarkets activities include:

- **Online Share Trading Platform**– PrimaryMarkets provides both companies and funds as well as individual securityholders with an online Platform to facilitate liquidity (<https://www.primarymarkets.com/>)
- **Transaction Management** – A unique offering of online services to companies and Funds. Services include third-party escrow services, digital share registry, AML/KYC and Sophisticated Investor verification, execution and clearing and settlement.
- **Investor Centres** – promotion of ASX and other listed companies.
- **Corporate Advisory** – PrimaryMarkets Advisory offers a full suite of corporate advisory solutions including capital markets (debt and equity), M&A and strategic advice. Our Advisory service offers high touch advice and execution and complements our online Platform to help companies achieve their capital management and strategic objectives.

Our Fees

The Company shall pay to PrimaryMarkets the following:

- a. Capital Raising Set Up Fee – A once-off fee of \$10,000 (plus GST) is payable upon execution of this Mandate. This fee covers the setup of the capital raising opportunity via a dedicated webpage for the Company as well as continued promotion on our Platform and via our digital/social marketing.
- b. Success Fee – a fee of 6% (plus GST) is payable by the Company to PrimaryMarkets on all subscriptions into the capital raising from investors introduced by PrimaryMarkets. Payment is required within 7 days of invoice being presented.

Appointment

Subject to the provisions herein and as evidenced by the signing of a counterpart of this Mandate, the Company will thereupon be deemed to have appointed PrimaryMarkets to carry out the services in accordance with the provisions of this Mandate. PrimaryMarkets works on a non-exclusive basis and will be acting on a best endeavours basis and does not represent or guarantee the success of the capital raising.

The term of this Mandate is for a minimum of 3 months from the date hereof and thereafter may be terminated by either party upon 7 days written notice. Notwithstanding termination by the Company the Success Fees will remain payable to PrimaryMarkets in relation to all investors introduced to the Company during the currency of this Mandate.

The provisions of this Mandate are also governed by the Platform Trading Rules as published by PrimaryMarkets on its website. In the event of any inconsistency between the provisions of this Mandate and the Platform Trading Rules, the provisions of this Mandate shall prevail.



Exclusions

PrimaryMarkets:

- a) Does not provide and will not be required to provide tax, legal regulatory, due diligence, valuation or accounting or other specialist or technical advice or services. The Company should obtain separate advice in relation to these matters.
- b) PrimaryMarkets will be entitled to rely on any such advice to the extent that it is relevant to the Mandate.
- c) Nothing in this Mandate expressed or implied imposes any commitment or obligation whatsoever, on the part of PrimaryMarkets, to underwrite or purchase securities or to commit any capital to the Company.
- d) PrimaryMarkets is engaged under this Mandate as an independent contractor and nothing in this Mandate or the nature of the engagement contemplated by it creates or will create an agency or fiduciary relationship between PrimaryMarkets and the Company.

PrimaryMarkets looks forward to working with your Company to successfully facilitate the capital raising and to developing a long and mutually beneficial relationship.

Please confirm that the terms of this Mandate are agreed to by the Company by signing and returning the below acceptance.

Please feel free to call if you have any questions.

Yours sincerely,

/s/ M. James Green

M. James Green
Executive Chairman

Accepted and agreed for and on behalf of ResolutionRx Limited

/s/ Jeff Eliot Margolis

Signature:

Jeff Eliot Margolis

Name:

Senior Financial Officer

Position:

Dated: 22 / May / 2023