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

FORM 8-K

Current Report

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

Date of Report (Date of earliest event reported): January 18, 2024

RESPIRERX PHARMACEUTICALS INC.
(Exact name of registrant as specified in its charter)

Delaware	**1-16467**	**33-0303583**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(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.

Indemnification Agreement

As discussed in more detail below, on January 18, 2024, the Board of Directors (the "Board") of RespireRx Pharmaceuticals Inc. (the "Company") appointed a new director, Dariusz Nasiek to the Board who is considered to be an outside director. The appointment was to fill a vacancy on the Board. In connection with the appointment and in conformity with its corporate policy of indemnifying all directors and officers, the Board also agreed to enter into an indemnification agreement with Dr. Nasiek substantially in the form applicable to all other directors and officers of the Company, namely, each existing director of the Company, Arnold S. Lippa and Jeff E. Margolis, both of whom are also officers of the Company and Joseph Siegelbaum who is an outside director and with the new director, Dariusz Nasiek, also an outside director (each director and/or officer, an "Indemnitee"). The Company will indemnify each Indemnitee when such Indemnitee is a party or threatened to become a party, by virtue of being a director or officer of the Company, from the costs and expenses, fines and certain other amounts in connection with certain proceedings, including proceedings in the right of the Company, so long as such Indemnitee acted in good faith and reasonably believed that such actions were not opposed to the best interests of the Company, as determined (i) by members of the Board of the Company not parties to such proceedings, (ii) by independent counsel if a quorum of disinterested directors is not available or so directs, or (iii) by a majority vote of stockholders of the Company, exclusive of any Indemnitee claiming indemnification who is also a stockholder of the Company, who shall not vote. The indemnifications provided by the form of Indemnification Agreement or any other indemnification pursuant to the Certificate of Incorporation or By-Laws are not exclusive of any other remedies that an Indemnitee may have.

Awards to Officers and Directors as Compensation

Also in connection with the appointment of the new director, as described below, on January 18, 20224, the Board agreed that Dr. Nasiek was entitled to quarterly compensation for his service as a director at the rate of $20,000 per quarter, earning the full quarter fee for participation in meetings of the Board during the first quarter of 2024. In addition, Dr. Nasiek is eligible for bonuses and may also be eligible for additional fees at the discretion of a majority of the disinterested members of the Board, including but not limited to attendance at Board meetings other than the normal quarterly meetings and committee membership or meeting attendance. The Board may make awards to Dr. Nasiek under the Company's 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan as well as the Company's 2015 Stock and Stock Option Plan, as amended.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On January 18, 2024, the Company's Board of Directors ("Board") adopted a resolution at a meeting of the Board held by video conference to invite Dr. Dariusz Nasiek to join the Board as an outside director and to fill a vacancy. Dr. Nasiek subsequently accepted the invitation and became an outside member of the Board. The Company has not yet determined on which committees of the Board Dr. Nasiek will serve.

Dr. Nasiek, MD, MBA, is a dedicated anesthesiologist with expertise in anesthesiology and interventional pain management. Dr. Nasiek is board certified by the American Board of Anesthesiology, the American Board of Pain Medicine and the American Board of Interventional Pain Physicians. Dr. Nasiek is also a Life Member of the American Society of Interventional Pain Physicians and a Member of the International Spine Intervention Society. He has been a practicing physician for the last 35 years. Since 2006, he has been the Managing Partner of Allied Neurology & Interventional Pain Practice, and since 2008, he has served as the Director of Anesthesiology at Hackensack Surgery Center. Dr. Nasiek is a leader specializing in non-surgical options for the treatment of spinal and non-spinal pain and is a pioneer in the use of innovative techniques in the cervical, thoracic and lumbar spine. His forward-looking approaches to pain management, regenerative medicine and tissue healing are described in the new 2nd Edition of his book entitled, "PRP, Platelet Rich Plasma: A New Paradigm in Regenerative Medicine."

The information provided in Item 1.01 under the headings "Indemnification Agreements" and "Awards to Officers and Director as Compensation" is incorporated herein by reference.

Item 7.01 Regulation FD Disclosure.

The press release announcing the Company's newly elected director is attached as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

A list of exhibits that are furnished and 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
99.1*	Press Release dated January 22, 2024
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* 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: January 22, 2024

RESPIRERX PHARMACEUTICALS INC.
(Registrant)

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

Exhibit 99.1

RespireRx Pharmaceuticals Inc. Announces the Appointment of Dr. Dariusz Naziek to Its Board of Directors

Glen Rock, N.J., January 22, 2024 /Globe Newswire – RespireRx Pharmaceuticals Inc. (OTC Pink Market:RSPI) ("RespireRx" or the "Company"), a leader in the discovery and development of innovative and revolutionary treatments to combat diseases caused by disruption of neuronal signaling, is pleased to announce the appointment of Dr. Dariusz Nasiek MD, MBA to its board of directors. Dr. Nasiek is a dedicated anesthesiologist with expertise in anesthesiology and interventional pain management. Dr. Nasiek is board certified by the American Board of Anesthesiology, the American Board of Pain Medicine and the American Board of Interventional Pain Physicians. Dr. Nasiek is also a Life Member of the American Society of Interventional Pain Physicians and a Member of the International Spine Intervention Society. He has been a practicing physician for the last 35 years. Since 2006, he has been the Managing Partner of Allied Neurology & Interventional Pain Practice, and since 2008, he has served as the Director of Anesthesiology at Hackensack Surgery Center. Dr. Nasiek is a leader specializing in non-surgical options for the treatment of spinal and non-spinal pain and is a pioneer in the use of innovative techniques in the cervical, thoracic and lumbar spine. His forward-looking approaches to pain management, regenerative medicine and tissue healing are described in the new 2nd Edition of his book entitled, "PRP, Platelet Rich Plasma: A New Paradigm in Regenerative Medicine."

"It is a pleasure to welcome Dr. Nasiek as a director on our board. He brings considerable value not only his status as an outside director, but the perspective that he provides because of his considerable clinical experience in the areas in which RespireRx is developing its compounds: treatment of respiratory disorders and spinal injury with our AMPAkine platform and the development of our GABAkines for use as non-narcotic analgesics and for treatment resistant epilepsy," said Arnold Lippa, Executive Chairman of the Board, Interim Chief Executive Officer, Interim President and Chief Scientific Officer.

"I am pleased to join the RespireRx board of directors and look forward to contributing significantly based upon my extensive direct patient experience with most opportunities being developed by the company and my broader medical experience as well as my general medical and life science intellectual curiosity. I am excited about the science, the clinical development strategies and the potential breakthroughs for patient care," said Dr. Nasiek.

About RespireRx Group

RespireRx Pharmaceuticals Inc. and its subsidiaries and business units ("RespireRx Group") are discovering and developing 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 epilepsy, pain, attention deficit hyperactivity disorder ("ADHD"), recovery from spinal cord injury ("SCI"), certain neurological orphan diseases and obstructive sleep apnea ("OSA"). The RespireRx Group is developing a pipeline of new and repurposed drug products based on our broad patent portfolios for two drug platforms: (i) neuromodulators, which include GABAkines and AMPAkines, proprietary chemical entities that positively modulate (positive allosteric modulators or "PAMs") $GABA_A$ receptors and AMPA-type glutamate receptors, respectively, and (ii) pharmaceutical cannabinoids, which include dronabinol, a synthetic compound that acts upon the nervous system's endogenous cannabinoid receptors and

The RespireRx Group 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.

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, RespireRx has licensed rights to certain selectively acting GABAkines 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. EndeavourRx 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, RespireRx has developed a family of novel, low impact AMPAkines, 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.

AMPAkines 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 AMPAkines may represent a novel, non-stimulant treatment for ADHD with a more rapid onset of action than alternative non-stimulants, such as Straterra® (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, RespireRx's lead AMPAkines, to improve motor nerve activity and muscle function in a number of animal models of spinal cord injury (SCI).

***ResolutionRx: Pharmaceutical Cannabinoids*.**

ResolutionRx Ltd (Australian Company Number a/k/a ACN 664 925 651) was formed in Australia on January 11, 2023 by RespireRx as an unlisted public company. RespireRx has contributed by sublicense and license with ResolutionRx, its sleep apnea drug development program subject to certain liabilities. ResolutionRx now engages in the research and development ("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 for 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 Australian R&D Tax Incentive ("RDTI"). Dronabinol, an endocannabinoid receptor agonist, 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 90 million people in the United States, the United Kingdom, Germany and Australia and that has been linked to increased risk for hypertension, heart failure, depression, and diabetes. There are no approved drug treatments for OSA.

Because dronabinol is already FDA approved for the treatment of AIDS related anorexia and chemotherapy induced nausea and vomiting, RespireRx and ResolutionRx further believe that its repurposing strategy would only require, in the United States, 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.

Additional information about RespireRx and the matters discussed herein can be obtained on the RespireRx website 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.

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 September 30, 2023 filed with the SEC on November 17, 2023.

Company Contact:

Jeff Margolis

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