



ResolutionRx Ltd, a wholly owned subsidiary of RespireRx Pharmaceuticals Inc. Enters into LOI and Term Sheet with Radium Capital for the financing of anticipated Research and Development Credits

Glen Rock, N.J., February 1, 2023 /Globe Newswire - RespireRx Pharmaceuticals Inc. (OTC Markets: 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 that, on January 27, 2023, ResolutionRx Ltd ("ResolutionRx"), a newly formed Australian unlisted public company, and initially, a wholly-owned subsidiary of RespireRx, entered into a Letter of Intent ("LOI") and Term Sheet ("Term Sheet") with Radium Capital ("Radium"). The LOI and Term Sheet summarize the background and principal terms of a series of planned financing arrangements between Radium Capital ("Radium") and ResolutionRx Ltd, in order to unlock research and development tax credits available in Australia to companies like ResolutionRx.

ResolutionRx and Radium have agreed to enter into a series of loan agreements which in the United States may be considered to be analogous to a line of credit designed to finance research and development (R&D) efforts prior to receipt of The Research and Development Tax Incentive ("R&DTI") funding from the Australian government. According to the Australia government website <https://business.gov.au/grants-and-programs/research-and-development-tax-incentive>, "The Research and Development Tax Incentive (R&D Tax Incentive or R&DTI) helps companies innovate and grow by offsetting some of the costs of eligible research and development (R&D)."

The R&DTI is the sum of the R&D company's corporate tax rate and an incentive rate, subject to certain limitations. In the case of ResolutionRx, the R&DTI is expected to be comprised of a corporate tax rate of 25% plus the incentive rate of 18.5% for a total of 43.5% and would represent an annual refund after the filing of ResolutionRx's annual tax return as of 30th June of each year. Subject to an Overseas Finding, certain R&D expenditures outside Australia will be eligible.

"The LOI and Term Sheet announced today creates a means of realizing the R&DTI funds well in advance of the annual cash receipt from the Australian government and, as such, create a very valuable non-dilutive means of supporting our R&D efforts towards the commercialization of dronabinol for the treatment of obstructive sleep apnea (OSA)," said Jeff Margolis, Director and Senior Financial Officer of ResolutionRx and Director and Chief Financial Officer of RespireRx."

Background

Radium

Radium, founded in 2017, is in the business of funding secured loans to Australian companies engaged in research and development activities ("R&D") that qualify for the R&D tax credit offered by the Australian government. Radium sponsors a program called Radium Advance to enable businesses to unlock their tax refunds sooner. Advances are made to client companies engaged in R&D pursuant to a predefined set of definitive documents, during the course of the R&D process (each advance is a separate secured loan, but the terms of the loans remain the same for each advance), allowing client companies to access capital throughout the R&D timeline rather than waiting until the annual tax return is filed in Australia (most companies are on a 30th June fiscal/tax year end in Australia). Radium advances up to 80% of the anticipated refund upon request of client companies (less than 80% is at the discretion of the borrower), subject to

appropriate documentation including, but not limited to: (i) Radium’s completion of satisfactory due diligence and investment committee approval, (ii) confirmation that the client company is entitled to receive the refundable R&D tax offset, (iii) a review by client company’s R&D advisor (accountant) chosen from a list of acceptable advisors provided by Radium and receipt by Radium of a “comfort” letter from the review, (iv) receipt of details of the R&D expenditure and refundable R&D Tax Offset (including incurred eligible R&D expenditures, estimated R&D Tax Offset and estimated Overseas Expenditure), and (v) receipt by Radium of a “comfort” letter from the client company’s tax advisor (accountant) confirming all company tax obligations are up to date. The annual interest rate on the loans as of February 23, 2023 for new clients is 16%. The loans will be secured by a first ranking charge (in the United States, it would be thought of as a first lien) over the R&D tax refund and a Featherweight Security Agreement, which is a form of security agreement, which in this case, would give Radium, in a situation of Administration under the Corporation Act 2021 or other laws, rules and regulations, the right to control the tax and tax refund process. The loans are repaid by assigning the refund to directly to Radium.

About RespireRx Pharmaceuticals Inc.

RespireRx Pharmaceuticals Inc. is a leader 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. RespireRx 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 Δ^9 -tetrahydrocannabinol (“ Δ^9 -THC”) that acts upon the nervous system’s endogenous cannabinoid receptors and (ii) neuromodulators, which include AMPAkinases and GABAkinases, 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 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, 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, RespireRx 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 Company’s web-site at www.RespireRx.com or in the Company’s filings with the Securities and Exchange Commission at www.sec.gov.

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, 2021, as filed with the SEC on April 15, 2022 (the “2021 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 2021 Form 10-K 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 2021 Form 10-K 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 2021 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.

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