



RespireRx Pharmaceuticals Inc. Officers and Directors Elect to Forgive \$2,356,733 of Past Due Cash Compensation and Receive Non-Qualified Stock Options to Reduce Balance Sheet Debt

Glen Rock, N.J., December 15, 2018/Globe Newswire – RespireRx Pharmaceuticals Inc. (OTC QB: RSPI) (“RespireRx” or the “Company”), a leader in the development of medicines for the treatment of respiratory disorders for which there are no approved pharmaceuticals, particularly sleep apneas and drug-induced respiratory depression, announces that, by unanimous written consent dated December 9, 2017, the Board of Directors of the Company approved the adoption of the Second Amendment (the “Amendment”) of the Amended and Restated RespireRx Pharmaceuticals Inc. 2015 Stock and Stock Option Plan (the “2015 Plan”) to enable a \$2,668,718 decrease in outstanding accrued compensation and other liabilities of which \$2,356,733 represents amounts that were payable by the Company to three executive officers and the two independent members of the Board of Directors. The Amendment increases the shares issuable under the plan by 3,946,799, from 3,038,461 shares to 6,985,260. Other than the change in the number of shares available under the 2015 Plan, no other changes were made to the 2015 Plan by the Amendment.

In conjunction with the forgiveness of \$2,668,718 of accrued compensation and other liabilities, the Company issued 1,848,418 non-qualified stock options (“NQSOs”) from the Plan.

The effect of the above, when viewing it in the context of RespireRx's balance sheet as of September 30, 2017 as reflected in the Company's current Quarterly Report on Form 10-Q, would be to reduce total liabilities from \$6,949,875 by \$2,668,718 to \$4,281,157, a decrease of 38.7%. That total decrease is comprised of the following: (i) accrued compensation, including that of one former officer, would have declined from \$2,757,433 by \$2,557,083 to \$200,350, a decrease of 92.7% and (ii) accounts payable and accrued expenses would have declined from \$2,958,239 by \$111,635 to \$2,846,604, a decrease of 3.8%. No other liabilities would have been affected. The Black Scholes value of the options granted is approximately equal to the reduction in the amount of the liabilities.

In connection with the announced forgiveness by existing officers, a former officer and all directors and two vendors, of the majority of past due compensation and other amounts payable to them, for NQSOs, Dr. James S. Manuso, President & CEO of RespireRx, commented, “I am extremely pleased to inform our shareholders of these transactions. The resulting improvement in the profile of our balance sheet makes clear management's unerring commitment to the enhancement of shareholder value. It makes our Company a more attractive vehicle for investment and partnering.

This important transaction clearly expresses our collective belief in the future of our Company and the excellence of our medicines in development. It is borne of considerable personal sacrifices on the parts of our team members. Some of our officers have foregone cash compensation for more than four years to help assure that dronabinol, an oral medicine that could become the first ever to be approved for the treatment of Obstructive Sleep Apnea, gets to patients who may benefit from it as well as to advance our ampakine program.

The story of RespireRx is the very story of the biotech and pharmaceutical industries – risk-embracing shareholders drive a small group of talented, entrepreneurial professionals and



managers to pursue a dogged belief in a mission to make new medicines available for suffering patients. Setbacks and challenges have not deterred us from accomplishing the goal -- we now have a Phase 3-ready medicine in our portfolio. I am proud to be working with everyone at RespireRx and I express my gratitude for their forbearance and sacrifices on behalf of our shareholders. Above all else, I thank our steadfast shareholders for enabling RespireRx.”

Award of Common Stock Options

By the same unanimous written consent dated December 9, 2017, the Board of Directors of the Company awarded NQSOs (i) to purchase 608,704 shares of Common Stock of the Company to James S. Manuso, (ii) to purchase 559,595 shares of Common Stock of the Company to Arnold S. Lippa, (iii) to purchase 388,687 shares of Common Stock of the Company to Jeff E. Margolis, (iv) to purchase 38,114 shares of Common Stock of the Company to each of James Sapirstein and Kathryn MacFarlane, both independent directors, (v) to purchase 138,842 shares of Common Stock of the Company to RespireRx’s former Chief Financial Officer, (vi) to purchase 77,362 shares of Common Stock of the Company to two vendors, and (vii) to purchase 100,000 shares to Richard D. Purcell, Jr. Concurrently with these awards, Messrs. Manuso, Lippa, Margolis and Sapirstein and Ms. MacFarlane, forgave amounts due to them for accrued compensation or director fees, as applicable, with the same value as the Black-Scholes value of the options awarded, \$878,360, \$807,497, \$560,876, \$55,000 and \$55,000, respectively, or \$2,356,733 in the aggregate. The award to Mr. Purcell was an additional grant awarded as compensation and was unrelated to the forgiveness any amounts owed to Mr. Purcell or any entity controlled by Mr. Purcell. The NQSOs granted to the Company’s former Chief Financial Officer, had a Black-Scholes value of 50% of the \$400,700 of accrued and unpaid compensation. The awarded NQSOs vested upon issuance and expire on December 9, 2027, except for those awarded to Mr. Purcell, which expire on December 9, 2022. The exercise price of the options of \$1.45 per share is the closing market price of shares of Common Stock of the Company as of the date of issuance. The foregoing description of the options awarded does not purport to be complete and is qualified in its entirety by reference to the full text of the Form of Non-Statutory Stock Option Award Agreement under the 2015 Plan, a copy of which is attached as Exhibit 10.2 to the Company’s Current Report on Form 8-K filed July 8, 2015, and which is incorporated herein by reference, as supplemented by the Addendum attached as Exhibit 10.2 to this Current Report on Form 8-K filed December 14, 2017, which is incorporated herein by reference.

About RespireRx Pharmaceuticals Inc.

RespireRx Pharmaceuticals Inc. is a leader in the development of medicines for respiratory disorders, with a focus on sleep apneas and drug-induced respiratory depression. 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.

RespireRx has a pipeline of medicines in Phase 2 clinical development focused on pharmaceutical treatments for a variety of breathing disorders. Clinical development in the area of respiratory disorders, particularly drug-induced respiratory depression and sleep apnea, has created opportunities for the development and commercialization of the Company’s compounds.



Ampakines. One platform of proprietary medicines being developed by RespireRx are ampakines, which act to enhance the actions of the excitatory neurotransmitter glutamate at AMPA glutamate receptors. Several ampakines, in both oral and injectable forms, are being developed by the Company for the treatment of a variety of breathing and CNS disorders. In clinical studies of respiratory function, select ampakines have shown preliminary efficacy in central sleep apnea and in the control of respiratory depression produced by opioids, without altering the opioid analgesic effects. A Phase II clinical trial of the ampakine CX717 demonstrated preliminary efficacy in adult attention deficit hyperactivity disorder (ADHD). In animal models of orphan disorders, such as Pompe Disease, spinal cord injury and perinatal respiratory distress, it has been demonstrated that certain ampakines improve breathing function. The Company's compounds belong to a new class that does not display the undesirable side effects previously reported for other ampakines.

Cannabinoids. The other platform being developed by RespireRx is the class of compounds known as cannabinoids, including dronabinol. Under a license agreement with the University of Illinois, the Company has rights to patents claiming the use of cannabinoids for the treatment of sleep-related breathing disorders.

Additional information about the Company 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.

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 and Section 21E of the Securities Exchange Act of 1934 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 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 are all forward-looking statements.

In some cases, forward-looking statements may be identified by words including "anticipates," "believes," "intends," "estimates," "expects," "plans," and similar expressions 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 proposed products, and (iv) the need for, and availability of, additional financing.

The forward-looking statements included herein are based on current expectations that involve a number of risks and uncertainties. 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 and competitive conditions, 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 the Company believes that the assumptions underlying the forward-looking statements are reasonable, actual results may differ materially from those set forth in the forward-looking statements. In light of the significant uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be



regarded as a representation by the Company or any other person that the Company's objectives or plans will be achieved.

Factors that could cause or contribute to such differences include, but are not limited to, regulatory policies or changes thereto, available cash, research and development results, competition from other similar businesses, and market and general economic factors. This discussion should be read in conjunction with the condensed consolidated financial statements (unaudited) and notes thereto included in Item 1 of the Company's current Quarterly Report on Form 10-Q as of and for the periods ending September 30, 2017 and the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, including the section entitled "Item 1A. Risk Factors." The Company does not intend to update or revise any forward-looking statements to reflect new information, future events or otherwise.

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