## **EndeavourRx LLC**

#### **MANAGEMENT TEAM:**

#### Arnold Lippa, PhD

CEO, President
Chief Scientific Officer

#### Jeff Margolis

Chief Financial Officer Senior VP Finance

#### **OFFICE LOCATION:**

126 Valley Rd. Glen Rock, NJ 07452

### INTELLECTUAL PROPERTY

Extensive IP Portfolio Patent Extensions Market Exclusivity EndeavourRx Patents Pending to 2037

#### **CONTACT:**

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EndeavourRx LLC- EndeavourRx LLC, a Delaware limited liability company with a single member, RespireRx Pharmaceuticals Inc., is developing two classes of proprietary central nervous system (CNS)-acting compounds known as AMPAkines and GABAkines, which are positive allosteric modulators (PAMs) of the AMPA glutamate receptor and the GABA<sub>A</sub> receptor, respectively. AMPAkines enhance the excitatory actions of glutamate, the major excitatory neurotransmitter, at the AMPA receptor complex, which mediates most excitatory transmission in the CNS. GABAkines selectively amplify inhibitory neurotransmission at a highly specific, subset of GABA<sub>A</sub> receptors, thus producing a unique efficacy profile with reduced side effects.

**AMPAkines** - Through an extensive translational research effort from the neuronal level through Phase 2 clinical trials, the company has developed two advanced stage AMPAkines, CX717 and CX1739, that have demonstrated safety in multiple Phase 1 clinical studies. In multiple Phase II clinical studies, both compounds demonstrated target site engagement by antagonizing the ability of opioids to induce respiratory depression.

Spinal Injury - Preclinical studies have highlighted the potential ability of these AMPAkines to improve respiration, bladder and certain motor functions in animals with spinal injury. In a recent paper entitled "Acute ampakines increase voiding function and coordination in a rat model of SCI" (Rana, Alom et al. eLife 2023;12:RP89767. DOI: <a href="https://doi.org/10.7554/eLife.89767">https://doi.org/10.7554/eLife.89767</a>). The US Department of Defense (DOD) has approved a \$1.8 million translational research award to Shirley Ryan AbilityLab to fund a two stage Phase 2A and 2B clinical study in order to determine the safety and efficacy of CX1739 our lead clinical AMPAkine, to improve bladder function and motor activity in individuals with spinal cord injury (SCI). This grant award supports the ongoing collaboration among scientist teams led by Milap Sandhu, PT, PhD, research scientist at Shirley Ryan AbilityLab, a rehabilitation research hospital in Chicago, and Dr. Arnold Lippa from EndeavourRx and RespireRx and Dr. David Fuller from the University of Florida.

Attention Deficit Disorder - CX717 has successfully completed a Phase 2 trial producing a rapid, statistically significantly reduction in the symptoms of adult ADHD and appears to have a lower liability profile than existing amphetamine treatments. Subject to raising sufficient financing (of which no assurance can be provided), we believe that we will be able initiate a human Phase 2B study in patients with ADHD with either CX717 or CX1739.

*GABAkines* - We are currently focusing on developing the GABAkine KRM-II-81 for the treatment of epilepsy and pain. IND enabling animal safety and toxicology studies are currently being conducted in conjunction with and sponsored by the National Institutes of Health.

Pain - In a broad range of animal models of pain, KRM-II-81 reduced pain 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. KRM-II-81 has advanced to the next level of evaluation within the NIH HEAL Initiative® Preclinical Screening Platform for Pain (PSPP) program which is focused on improving prevention and treatment strategies for opioid misuse and addiction, and enhancing pain management. PSPP has provided all of the funding for all work conducted. Our parent company, RespireRx has applied for an SBIR grant, which if funded, will support IND enabling studies.

Epilepsy - KRM-II-81 has displayed a high degree of anti-convulsant activity in a 33 animal studies, particularly treatment resistant and pharmaco-resistant models, principal reasons why epileptic patients may require brain surgery to control their seizures. In three studies KRM-II-81 showed dramatic reductions in epileptiform electrical activity when applied to brain slices surgically removed from epileptic patients. Because of their GABA<sub>A</sub> receptor subunit specificity, the compounds have a greatly reduced liability to produce sedation, motor incoordination, memory impairments and tolerance, side effects commonly associated with non-specific GABA PAMs, such as benzodiazepines.

RespireRx Group - RespireRx Pharmaceuticals Inc. ("RespireRx") and its subsidiaries, together the RespireRx Group, are focused on the discovery and development of innovative treatments for psychiatric and neurological disorders caused by alterations of neuronal signaling and that represent major unmet medical needs. Using the concepts of data mining, re-discovery and re-purposing, the RespireRx Group has assembled three drug platforms and based on their mechanisms of action, transferred and continues to transfer to them to EndeavourRx LLC and ResolutionRx Ltd. ResolutionRx Ltd is RespireRx's wholly-owned subsidiary repurposing with a proprietary formulation, dronabinol for obstructive sleep apnea and has completed two statistically significant Phase 2 studies.

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Special Note Regarding Forward-Looking Statements: Certain statements included or incorporated by reference in this Executive Summary, including information as to the future financial or operating performance of the Company and its drug development programs, constitute forward-looking statements. The words "believe," "expect," "anticipate," "contemplate," "target," "plan," "intend," "continue," "budget," "estimate," "may," "schedule" and similar expressions identify forward-looking statements. Forward-looking statements include, among other things, statements regarding future plans, targets, estimates and assumptions. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable EndeavourRx LLC, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Due to these various risks and uncertainties, actual events may differ materially from current expectations. Investors, potential investors, potential collaborators and other stakeholders are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Forward-looking statements are made as of the date of this Executive Summary and the Company disclaims any intent or obligation to update publicly such forward-looking statements, whether as a result of new information, future events or results or otherwise.