ResolutionRx

19 September 2024

FOCUSED ON THE TREATMENT OF SLEEP RELATED BREATHING DISORDERS – DRONABINOL FOR OBSTRUCTIVE SLEEP APNEA

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AND FORWARD-LOOKING STATEMENT

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This presentation contains certain forward-looking statements about both ResolutionRx Ltd and RespireRx Pharmaceuticals Inc. and its subsidiaries and business units (collectively, the "Company") within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the US Securities Exchange Act of 1934, as amended (the "Exchange Act"), and other similar laws, rules and regulations of other jurisdictions and the Company intends that such forward-looking statements be subject to the safe harbors 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 presentation.

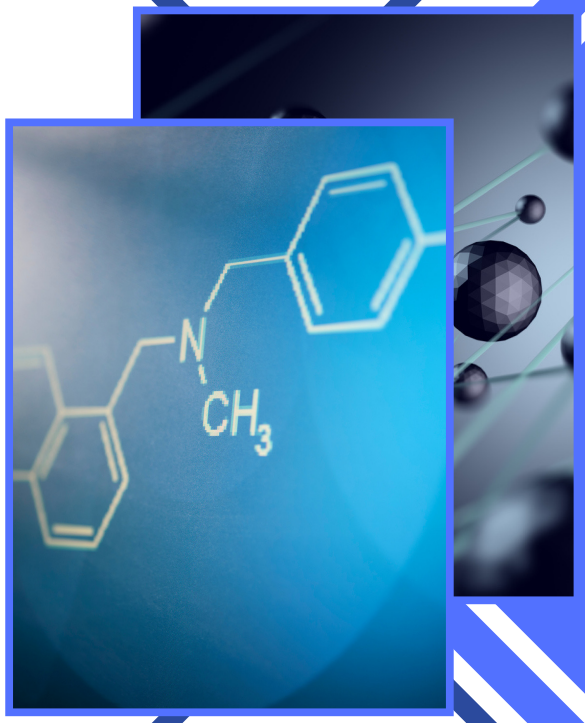
These factors include but are not limited to, regulatory policies or changes thereto, available cash, research and development results, issuance of patents, competition from other similar businesses, interest of third parties in collaborations with us, and market and general economic factors, and other risk factors disclosed in "Item 1A. Risk Factors" in RespireRx Pharmaceutical Inc.'s ("RespireRx") 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"). RespireRx has not yet filed its Annual Report on Form 10-K for the fiscal year ended December 31, 2023, nor its Quarterly Reports on Form 10-Q as of March 31, 2024 or June 30, 2024. ResolutionRx Ltd financial periodic financial statements will be made available on request.

Company Profile

ResolutionRx, an unlisted public Australian company, is focused on repurposing, developing and commercialising proprietary pharmaceutical product candidates, our first candidate being the repurposing of a pharmaceutical cannabinoid.

ResolutionRx was created by RespireRx Pharmaceuticals Inc. (US OTC: RSPI) (RespireRx), which has contributed its cannabinoid drug development program to ResolutionORx.

ResolutionRx is continuing the research and development (R&D) associated with that program, initially for the development of a new formulation of dronabinol for use as a treatment for obstructive sleep apnoea ("OSA").



OBSTRUCTIVE SLEEP APNEA (OSA):

A WORLDWIDE PANDEMIC – THE PROBLEM

During OSA airflow is blocked

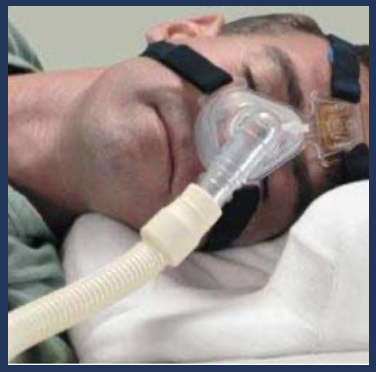
SLEEP APNEA IS NOT MERELY SNORING

- **A peripheral phenomenon that occurs when throat muscles intermittently relax and block airway during sleep.**
- **With OSA, a person can stop breathing 5 – 50 times per hour during sleep for 10 seconds or more each time.**
- **Afflicts more than 90 million people in the US, Australia, Germany and the United Kingdom alone and ~936 million worldwide.***
- **The consequences of undiagnosed and untreated OSA are medically serious and economically costly.**
- **Co-morbidities including hypertension, type II diabetes, obesity, stroke, congestive heart failure, coronary artery disease, cardiac arrhythmias, and even early mortality.**
- **In the U.S. alone, the annual estimated economic burden is approximately $162 (U.S.) billion according to the AASM (American Academy of Sleep Medicine).**

* Source: Lancet Respiratory Medicine - 2019 Aug 7(8): 687-698 Benjafield, A et al

THERE ARE NO DRUG THERAPIES FOR OSA – THE PROBLEM – CONTINUED

C-PAP IS THE STANDARD TREATMENT FOR OSA



IS THIS YOU ?

Low Compliance Rate Reduces C-PAP Effectiveness

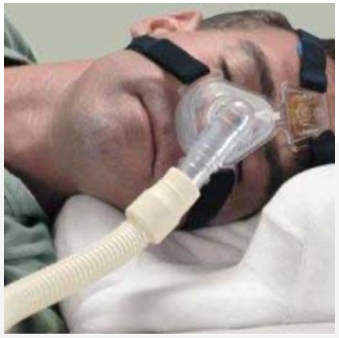
- **30% of patients prescribed CPAP never initiate treatment when prescribed a machine**
- **Over 50% of patients stop using CPAP in the first year**
- **Dronabinol for patients who cannot or will not tolerate CPAP**

Recalls -- Philips/Respironics exits US Market
-- Inspire's implantable device

Literature indicates should not be treatment of 1st choice in all cases

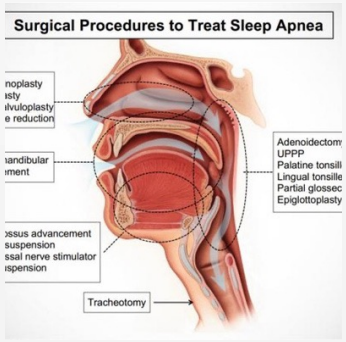
CPAP AND ALTERNATIVES NO DRUGS

Current Approved Treatments Include Devices and Surgery

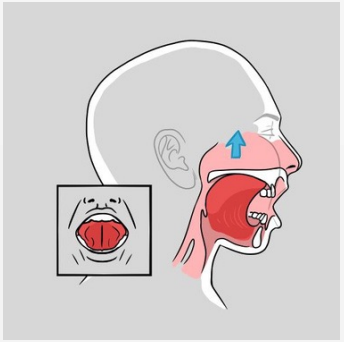


CPAP Device

Dental Devices



Surgery



Exercises and stimulant drugs for next day sleepiness

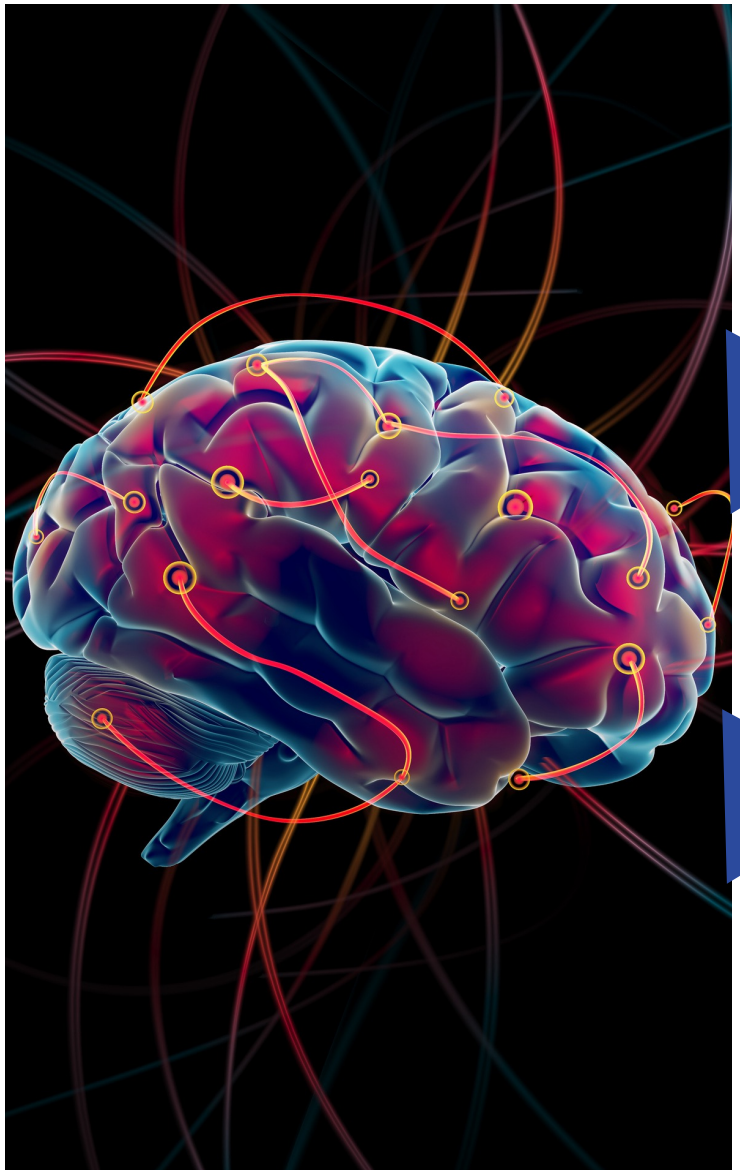
WHAT ARE PHARMACEUTICAL CANNABINOIDS?

Cannabinoids are pharmacologically active substances found in the cannabis (marijuana) plant.

Whether extracted from plants or synthetically manufactured, medical claims and uses of cannabinoids must be approved by US FDA and other international regulatory authorities.

Scientific study has focused on the two major cannabinoids, Δ9-tetrahydocannabinol (THC) and cannabidiol (CBD) and led to several commercial products approved by regulatory authorities.

The commercialisation of these pharmaceutical cannabinoids has opened the door to a greatly expanding market sector



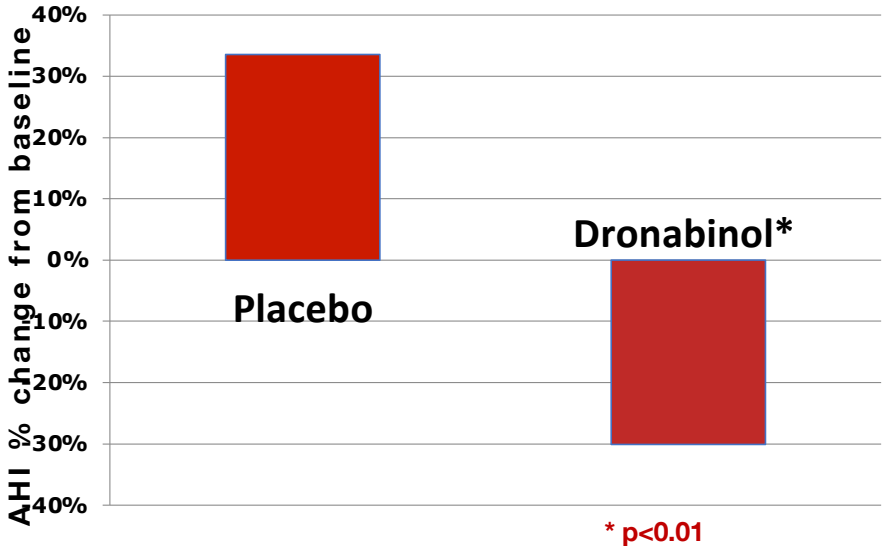
DRONABINOL:
A BREAKTHROUGH TREATMENT FOR OSA

Dronabinol Overview

- Dronabinol is an example of our repurposing strategy to reduce risk, cost and create efficiencies in R&D
- Dronabinol is a synthetic form of THC, a psychoactive molecule in cannabis
- It was the first pharmaceutical cannabinoid approved by US FDA in 1985
- Prescribed and sold in US for the treatment of anorexia in AIDS patients and nausea and vomiting in cancer patients undergoing chemotherapy.

DRONABINOL:
A BREAKTHROUGH TREATMENT FOR OSA

Phase 2A Clinical Study



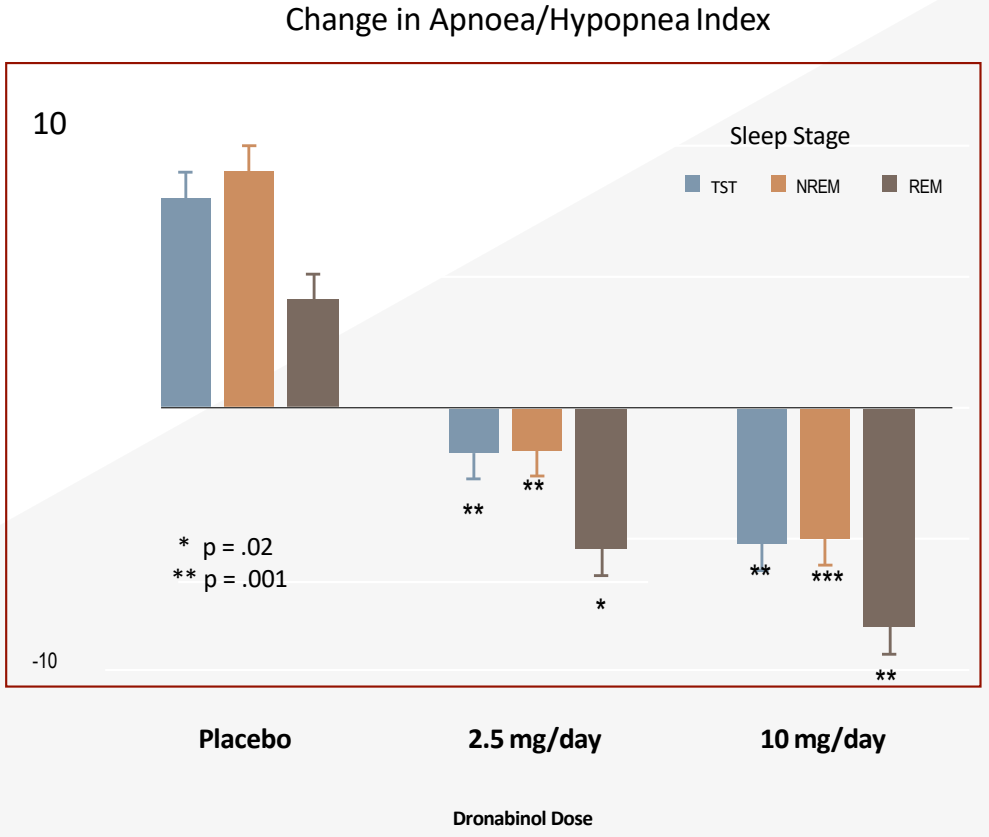
- Double Blind Placebo Controlled
- 2.5, 5 & 10 mg before bed
- 3-Week Dose-ascending Study
- n = 17

THE PACE CLINICAL TRIAL

- Phase 2B Randomized, Placebo-controlled, Parallel Groups, Multi-site Trial in 73 Patients with Moderate to Severe OSA
- Subjects Administered Either Placebo, 2.5 mg or 10 mg Dronabinol 60 minutes before bedtime
- Primary Outcome Measure – Apnea-Hypopnea Index (AHI)
- Secondary Outcome Measures

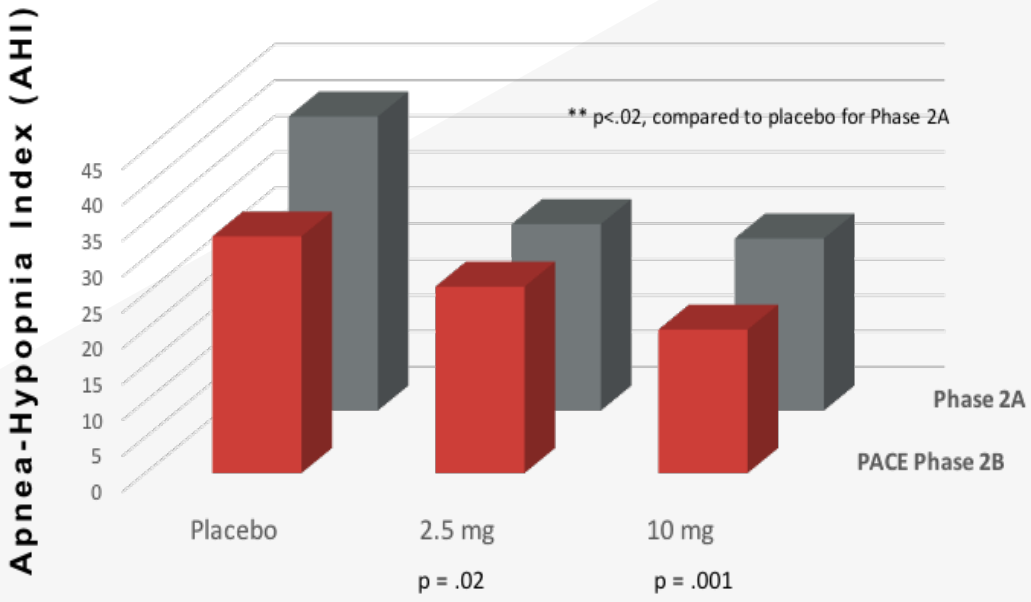
RESULTS OF 6-WEEK TREATMENT:

Dronabinol Reduces AHI



THE PACE TRIAL REPLICATES THE PHASE 2A STUDY

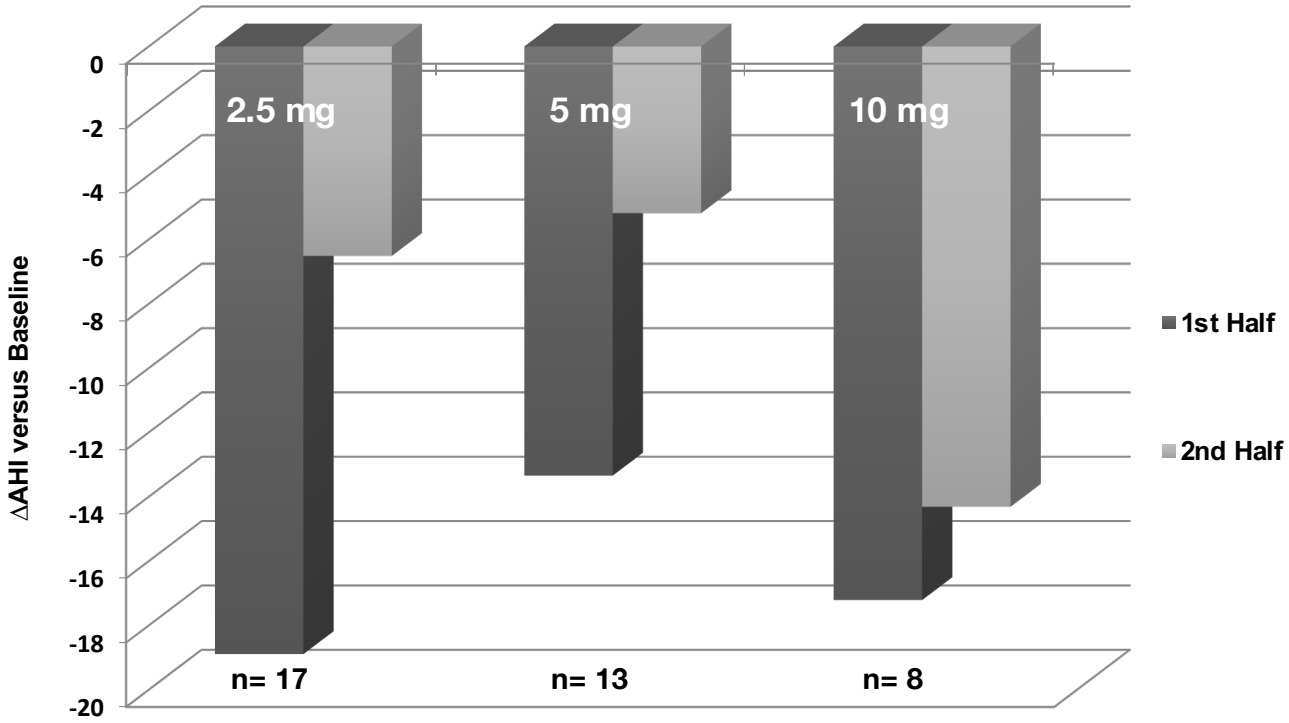
Two Phase 2 Trials Have Shown that Dronabinol Treatment Results in a Statistically Significant, Dose Related Improvement in AHI, a Primary Endpoint for US FDA Approval



* Double blind, placebo controlled dose-ascending study in patients with OSA, n=19

NEW FORMULATIONS BASED ON CLINICAL DATA

Change in AHI in the 1st 4 hours vs. the 2nd 4 hours of the night



The plasma half-life of dronabinol is 2 – 4 hours

- Low dose dronabinol is as effective as the high dose in the first half of the night
- Effectiveness diminishes in the second half of the night
- Opportunities for low dose, controlled release formulations

NEED FOR NEW DRONABINOL FORMULATIONS

Present Commercial Dronabinol Gel-cap Formulations

- Poor and erratic absorption due to insolubility, with some patients achieving very high levels and others achieving very low levels.
- Rapid and extensive first-pass liver metabolism, resulting in low blood levels and a relatively short half-life (approximately 2 - 3 hours) which is not optimally suited for therapeutic indications requiring blood levels to be sustained for 6 hours or longer.
- Undesirable side effects from high dosage strength required to achieve sustained, therapeutic blood levels

NEW LIPID-BASED DRONABINOL FORMULATIONS

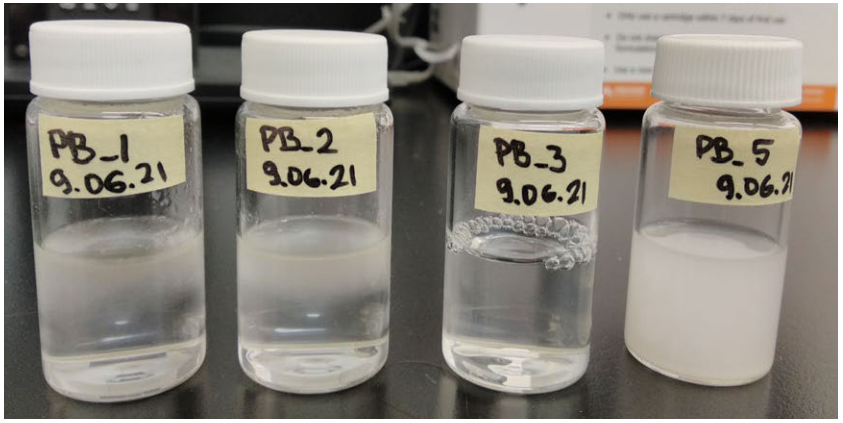
THE SOLUTION

OPTIMIZED FOR INDICATION AND IMPROVED IP POSITION

- Soluble with appropriate dissolution
- Room temperature stability
- Resistant to disturbance by stomach acids
- Particle size in the 50 - 150 nM range
- Lymphatic absorption to bypass liver metabolism
- Encapsulation efficiency
- Amenable to commercial scale production

NEW LIPID-BASED DRONABINOL FORMULATIONS

SOLUBILITY



Clear, no visible phase separation

FOUNDATIONS OF RESOLUTIONRX – THE SOLUTION

Development of Dronabinol

Refers to the development of dronabinol according to U.S. FDA and other foreign accepted regulatory pathways by which a company receives approval to market and sell a new drug.

Clinical Validation

Two Phase 2 clinical trials have been completed demonstrating the ability of dronabinol to significantly reduce the symptoms of obstructive sleep apnea, a sleep-related breathing disorder that afflicts an estimated 90 million people in the US, Australia, Germany and UK combined and ~936 million worldwide.

Intellectual Property

Issued and pending patents claiming cannabinoid compositions and methods for treating cannabinoid-sensitive disorders, including sleep apnea and other conditions, as well as novel dosage and controlled release compositions.

Defined Regulatory Route to Commercialization

505(b)(2) NDA in US and similar filings in other countries creates expedited path to market by allowing publicly available safety data.

Business Plan

Business plan and financial projections and independent valuation in place.

Corporate Structure

Ty Burton
Director

Arnold Lippa, Ph.D.
Director
Acting Co-CEO and CSO

Jeff Margolis
Director
Acting Co-CEO and CFO

Michael Burfield
Director

iNGENu CRO Pty Ltd
Contract Research Organization

INGENŪ CRO

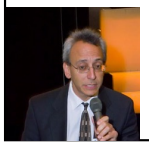
RespireRx Pharm.
Management
and R&D

RespireRx Pharmaceuticals Inc.

RDI Partners
Accounting
R&D Tax Incentive

rdi partners

Marc Radin
Controller



Ab Initio Pty Ltd
Formulation and
Manufacturing

ab initio pharma

DLA Piper-Australia
Counsel

DLA PIPER

Perks
Auditors

Perks.

RESOLUTIONRX

FINANCING STATUS

- ResolutionRx is eligible to participate in the Australian R&D tax credit, a refund, in our case, expected to be 43.5% of qualified research and development expenditures.
- Radium Capital has agreed to provide a debt facility to finance 80% of ResolutionRx's Australian research and development tax incentives.
- Based on an independent pre-money net asset value of A$33.75M (~US$22.5M), we are seeking to raise an additional A$18M (~US$12M) through the sale of Series A Preference Shares at a per share price of A$1.35 (~US$0.90).
- ResolutionRx has entered into a binding Letter of Intent with Cantheon Capital for an intended investment of US$3,125,000 (~A$4.7M) in the Series A Preference Shares which is 25% of the clinical trial research and development budget of the cannabinoid program.

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