



2020 Summary & 2021 Plans

ResMetrix Medical Ltd.

Dear Shareholders,

As a very unusual year has ended, it is my privilege to provide you with a summary of the Company's activities in 2020 and planned activities for 2021.

We hope to resume normal activities in 2021, secure a sufficient financing and accomplish our goals for the coming year.

General

- ResMetrix is developing an innovative wearable sensor that will remotely, passively, accurately & continuously monitor lung volume and breathing dynamics. The sensor is the only wearable product in the market today that can measure breathing patterns (waveform) and changes in lung volume (tidal volume). The target market is home care of respiratory disease patients.
- The Company was incorporated in October 2017 and concluded its tenure in the MindUP incubator in November 2019.
- The company was focusing during 2020 on R&D, developing our miniaturized solution that can be attached directly on the chest.

Management

- On June 2020, Aviv Lotan replaced Dr. Carmit Levy as the company's CEO.
- Aviv holds a LL.M in commercial law with specialties in venture capital and startups. Aviv has been a part of the exciting life science industry in Israel for the last 10 years, both as an entrepreneur (Kairos Consulting, Cordio Medical, Solace Medical, Medicann Pharma) and as an executive (former CEO of Amnis Therapeutics (TASE: AMNS)).
- Aviv brings extensive management experience in all aspects of medical device companies from ideas, through development until actual sales.
- Dr. Zvi Reznic and Dr. Ari DeRowe continue to be heavily involved in the Company. Zvi is leading the Company's R&D while Ari is leading the clinical aspects.
- In addition, our board of directors had 2 new additions this year:
 - Dr. Amir Belson is a serial entrepreneur, founder of Neoguide (acquired by Intuitive surgical); Vascular Pathways (acquired by C R Bard); Zipline Medical (acquired by Stryker); Radiation Medical; Vasostitch; Modular Surgical; Qool Medical; Emboline; and Oxyvive. Amir will assist the company in fund raising efforts, patent strategy and overall strategic development.
 - Dr. Laurence Keselbrenner is the Site Leader and VP R&D at Medtronic Yokneam and Medtronic's representative in MindUp's board of directors. Laurence has been a huge help from the start in connecting potential investors, fine tuning the company's applications and preparing the for the next R&D phase.

Concept Change

- During its time in the Incubator and until June 2020, the Company developed a chest strap, capable of measuring the patient's chest circumference during inhalation and exhalation phases. The Company claimed and proved in its clinical Proof-of-Concept on patients with asthma that the miniscule changes in circumference length, perfectly correlate to the patient's breathing patterns (waveform), as measured by a standard Spirometer.
- Up until June 2020, the Company has manufactured a chest strap prototype, consisting of a strap, hooked by two wires to a large electronic box, providing a breathing waveform.
- It was the intention of the Company to miniaturize the electronic box and manufacture a chest strap, similar to existing HR straps (as depicted in Image 1 below).
- However, as we approached the industry, we realized that we need to change the chest strap concept, for the following reasons:
 - The strap is an outdated, 30-year-old concept, starting with the proliferation of HR watches.
 - It is awkward, bulky and hard to put on and take off, especially for very young and elderly populations.
 - Since it can be taken off, we have no continuous knowledge about the patient's respiratory status. Furthermore, the patient may neglect to wear it.
 - It was apparent that in Covid-19 era, we need a disposable sensor.
- In light of the above, Aviv, together with the Board of Directors, has suggested that the Company change its sensor concept into a wearable patch, directly applied on the patient's body (as depicted in Image 2).

Image 1



Image 2



- The patch will be able to accurately, continuously and completely passively monitor the patient's breathing patterns and changes in lung volume (tidal volume).
- The disposable patch will be short (5 inches) and thin (3-4 millimeters at the thickest point). It could be applied to anyone, from a 6-month-old infant to an elderly 75-year-old woman.
- The sensor will become completely passive without the need for user intervention.

R&D

- Since the concept change from chest strap to patch, the Company has miniaturized the system electronics from the big board (Image 3) to a very small board (image 4).
- The Company is in the final design phase of the patch and will commence functional tests during January 2021.
- We aim to start subjects' respiratory monitoring in March 2021.
- Clinical trials will commence in Q4, 2021 (Pending additional funding).

Image 3

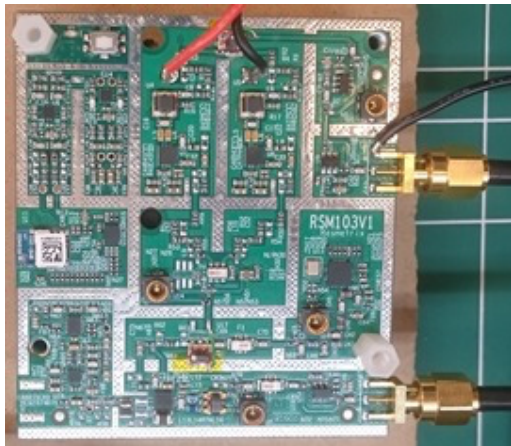


Image 4





2020 Additional Activities:

1. The Company secured a 200K financing round in January 2020.
2. The Company participated at the JVP and AstraZeneca (AZ) "[PlayBeyondBio](#)" acceleration program (see [video](#))
3. The program had success in three aspects:
 - a. JVP executives helped the Company understand **the algorithms** that we will develop once we start collecting the data and correlate it with clinical data. This has far greater potential value than the value of the sensor itself.
 - b. AZ executives were very enthusiastic about our technology and recommended that we will focus on the following indications:
 - i. Monitoring of Lung volume decrease, associated with COPD and Asthma exacerbations but also with sleep apnea, lung transplant rejection and Covid-19 diagnosis and monitoring.
 - ii. Detection and quantification of cough, which is a major indicator of respiratory compromise.
 - c. We received a letter of interest from AZ stating their interest in doing a joint clinical trial with them, as soon as we have the patch ready.

Funding

- The company raised \$200K (\$150K from a crowd funding Campaign on Together and \$50K from a private investor) on January 2020.
- The Company would like to raise **\$500K** for the following use of proceeds:
 - Conclude patch development and transfer to production.
 - Prepare a CE submission.
 - Conduct a clinical trial, monitoring COPD patients when they are hospitalized with a major exacerbation and for 30 days at home (or until re-admittance) in Ichilov hospital, Tel Aviv, Israel.
 - To conduct a joint clinical trial with Astra Zeneca.



2021 Activities:

Q1

- Functional testing of the patch (comfort, ease of use, adhesive strength, water resistance)
- Conclude R&D of the sensor and test technical functionality.
- Secure \$500K financing.
- Apply for 2 European grants:
 - Covid-19 innovation grant – €100K
 - ECI Accelerator program – €2.5M + Equity opportunities

Q2

- Patch transfer-to-production and create a cloud based Backoffice.

Q3

- Prepare a CE submission, including performing Validations & Verifications and creating a regulatory and quality system.

Q4

- Conduct a clinical trial in Ichilov hospital with COPD patients from hospitalization to home monitoring.
- Conduct a clinical trial with AZ

I hope this update provides a clear image of the complicated year that the Company has gone through and though it HAS been a challenging year, I believe that the ResMetrix technology remains a cutting-edge technology that can be a game changer in home management of respiratory disease.

Happy New Year!

Aviv Lotan, CEO

ResMetrix Medical Ltd.