



Therapnea™ - Innovative Treatment for OSA and Snoring

Over 900 million people world-wide suffer from Obstructive Sleep Apnea (**OSA**). Although there are several known therapies for **OSA** (behavioral, devices or surgery), **NONE** is as successful and effective as using air-pressure respiratory support to keep the airways open during sleep, making **CPAP** (Continuous Positive Air Pressure) the most common treatment of choice for moderate to severe OSA patients. Unfortunately, it still has many limitations regarding patient's compliance, and it is **ONLY SUCCESSFULLY USED BY ~50% OF PATIENTS**.

We at **Thomas Medical Ltd.** have been working on the development of a disruptive solution to respond to the unmet needs of patients that cannot tolerate current therapies. We have developed an innovative patented device treating **OSA** that overcomes the compliance difficulties of **CPAP** while providing the even higher effectiveness. We have managed to invent a **Break-Through Technology**, an innovation which is a real **GAME CHANGER SOLUTION**, with the potential to provide relief to tens of millions of patients who have no solution today, and at the same time save billions of \$\$ for the global health systems. The invention is an upper airway stenting device intended for the treatment of adult **OSA**. The stent is inserted **ONLY** after the patient is asleep and apnea events have started. The device, **Therapnea™**, operates by providing mechanical support to the walls of the pharynx and the back of the tongue, thereby preventing their collapse and eliminating airway obstruction during sleep. Additionally, the **Therapnea™** device includes several sensors to monitor patients' key parameters relevant for sleep disorders' which are sent the next morning via the cloud to the patients' MDs. In case one, or more, of the parameters is irregular it sends a warning message to the patient's MD.

We have already performed successfully a clinical study for the POC.

This product will be a prescription device.

Sleep apnea devices market size is expected to be worth USD 8.8 billion by 2023, with 7.7% CAGR from 2016 to 2023. According to the World Health Organization, over 900 Million people worldwide suffer from **OSA** and its related morbidity and mortality risks. Tens of millions are unable to tolerate, and therefore abandon, **CPAP** therapy. Low **CPAP** compliance, mainly due to severe discomfort, is recognized as the major issue, and many companies are investigating ways to improve it. **Therapnea™** has succeeded – proved in POC clinical trial.

A second product will be against snoring, based on the same technology. This product is expected to start sales 6-12 months after the **Therapnea™** device and most likely be an **OTC** device. We trust the market for the anti-snoring device will be by far larger than the **Therapnea™** market.

Thomas Medical has spent till now about US\$800,000, including EUR50,000 grant received from the **EU** and is now looking to raise additional amount US\$1-2,5M to finalize the development of the final product, produce 2-300 units for the clinical studies for the regulations (FDA, CE, NMPA (CFDA)) and perform these studies.

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