

Inspira Technologies Files U.S. Patent Application for its Innovative Respiratory Support Technology; Engages Leading U.S. Investment Bank for NASDAQ Listing

The technology's innovative design allows direct blood oxygenation at an early stage of treatment, preventing the need for invasive mechanical ventilation

The Company is pursuing an initial public offering on the NASDAQ stock exchange

RA'ANANA, Israel, Dec. 3, 2020, Inspira Technologies Ltd., an innovative medical technology company, announced today that it filed a patent application with the United States Patent and Trademark Office (USPTO) for its new blood oxygenation system, the AXT, which eliminates the need for invasive mechanical ventilation.

The AXT's direct blood oxygenation system prevents the need for mechanical ventilation by immediately elevating and stabilizing a patient's oxygen level with a minimally invasive treatment. During treatment, the patients remain awake and mobile, and breathe independently, preventing the need for intubation and medically induced comas used for traditional mechanical ventilation, which is limited to intensive care units (ICUs).

"Our unique technology has the potential to save countless lives by increasing the accessibility of efficient and effective respiratory support for patients worldwide," commented Dagi Ben-Noon, Inspira's Co-Founder and Chief Executive Officer. "Our direct blood oxygenation system provides a solution for the high risks and costs associated with existing ventilation technology. Additionally, the simplicity of our system enables medical professionals to easily treat patients, which will expand respiratory support use beyond ICUs to hospital wards and ambulatory settings."

The patent, which was prepared and filed by the office of Reinhold Cohen & Co., the leading intellectual property consulting firm in Israel, grants Inspira, for the first time, the exclusive ability to make a product designed to prevent the need for mechanical ventilation. The patent encompasses the technologies developed by Inspira, enabling the early treatment of patients with respiratory failure, who would otherwise be treated with invasive mechanical ventilation. Today, patients are treated with oxygen masks as a first-line response, with a majority deteriorating to invasive mechanical ventilation, which until now is the only choice.

Prior to the COVID-19 pandemic, approximately 20 million people per year were treated with mechanical ventilation. Mechanical ventilation use significantly increases the risk of mortality or irreversible complications. Patients must be medically induced into comas and intubated, which requires treatment to be done in the ICU and supported by professionals with specialized training. In addition, the process of weaning patients off invasive mechanical

ventilation is a complex and lengthy procedure that prolongs hospitalization and requires specialized medical staff.

Dr. Udi Nussinovitch, Inspira's Co-Founder and Chief Scientific Officer stated, "We have a strong medical team of cardiologists, lung specialists and surgeons that are dedicated to delivering a truly innovative respiratory support system that will save lives, improve quality of life for patients, and shorten the recovery time of millions of people around the world. The benefits of our solution are enormous – for the first time ever, Inspira has developed a preventative alternative treatment to mechanical ventilation, preempting the need for medically induced comas. Additionally, our system can be connected to the body by intermediate-level medical personnel and even by medical interns. This system addresses the core limitations of existing solutions and increases patient accessibility like never before."

About Inspira Technologies:

Inspira Technologies is an innovative medical technology company in the respiratory support space. The Company has developed a breakthrough respiratory support system, the AXT, which directly oxygenates blood and immediately elevates and stabilizes patient oxygen levels. The AXT system is a preventative alternative to highly invasive mechanical ventilation systems, preventing the need for medically induced comas and intubation. The technology solution lowers the risks and costs of existing ventilation systems by allowing patients to remain awake and mobile during treatment, and the simple system design allows for broader medical use.

For more information, please visit our corporate website: <https://inspira-technologies.com/>.

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