INSPIRA
Breakthrough Oxygenation

Inspira Technologies Reached Important Milestone as It Completed a Pump Bench Study

The "External Lung" pump is a core component of the ART device

Ra'anana, Israel / August 18, 2021/ -- Inspira Technologies OXY B.H.N. Ltd ("Inspira Technologies" or the "Company"), a specialty medical device company engaged in the research, development, manufacturing, and marketing of proprietary respiratory support technologies, announced today that it has successfully completed a pump bench study as the company progresses closer towards the manufacturing phase.

Inspira Technologies is developing an early extracorporeal respiratory support system, the ART device, which functions as an "external lung". The ART device is intended to allow patients to remain awake during treatment, while potentially preventing the use of highly invasive, risky and costly mechanical ventilation systems.

The pump is a key component of any extracorporeal oxygenation system. This component includes a motor and a pump head. It pumps the patient's blood outside of the body through the extracorporeal oxygenation system, allowing the lungs to rest. The bench study is an important milestone in the selection of the ART device's pump.

Inspira's proprietary ART device pump was compared to other leading centrifugal pumps. All pumps are designed to minimize the amount of damage to blood (hemolysis) during operation. The study, which was conducted in the Company's labs, was performed according to international standard practice for assessment of hemolysis in continuous flow blood pumps. In this study, the hemolysis of centrifugal pumps was investigated in vitro by comparing various scenarios of operation.

Dagi Ben-Noon, Inspira's Chief Executive Officer, stated: "The pump is one of the core components of our ART device. The pump experiment represents an important milestone for us as it enables us to progress to manufacturing phase".

Inspira Technologies OXY B.H.N. Ltd.
Inspira Technologies is an innovative medical technology company in the respiratory treatment arena. The Company has developed an early extracorporeal respiratory support system, the ART device, which it believes will elevate and stabilize patient oxygen saturation levels. The Company's ART technology potentially allows patients to remain awake during treatment while minimizing the use of the highly invasive, risky, and costly mechanical ventilation systems that require medically induced coma. The Company's product has not yet been tested or used in humans and has not been approved by the U.S. Food and Drug Administration (FDA).

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

Forward-Looking Statement Disclaimer
This press release contains express or implied forward-looking statements pursuant to U.S. Federal securities laws. For example, the Company is using forward-looking statements when it discusses that it has conducted a bench study which will allow it to progress to the manufacturing phase of its ART pump. These forward-looking statements and their implications are based on the current expectations of the management of the Company only and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. Except as otherwise required by law, the Company undertakes no obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. More detailed information about the risks and uncertainties affecting the Company is contained under the heading "Risk Factors" in the Company's Registration Statement on Form F-1 filed with the SEC, which is available on the SEC's website, www.sec.gov.

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