

# INSPIRA

## Inspira Technologies and Ben-Gurion University Have Developed a Platform Designed to Prevent Blood Clotting in Inspira's ART System

### An oxygen releasing microbubble platform

Ra'anana, Israel, July 19, 2021 – Inspira Technologies Oxy B.H.N. Ltd. (Nasdaq: IINN, IINN.W), a breakthrough respiratory medical technology leader, announced today the completion of a development relating to the potential prevention of blood clotting when used in conjunction with its Augmented Respiration Technology (ART) system. The platform is intended to be integrated into the company's novel ART system, which is currently in its development phase.

The use of anticoagulants for preventing blood clotting during invasive oxygen therapy is standard procedure, despite these drugs posing a high risk. In some cases, anticoagulant medicines increase a person's risk of life-threatening bleeding in different locations, such as the brain or gastrointestinal tract.

With the potential new platform, created in collaboration with Ben-Gurion University, Inspira aims to extend the life of oxidizers and potentially prevent blood clotting through its ART system. The research and development process was led by **Prof. Joseph Kost, from the Department of Chemical Engineering (Past Dean of the Faculty of Engineering Sciences) at Ben-Gurion University.**

Inspira and Prof. Kost have developed and characterized a stable polymeric microbubbles (MBs) platform that releases oxygen on demand. The development process required in-depth research to evaluate the procedures for oxygen engulfment in MBs and observe oxygen release at the required rates. This novel proposed technology will be further developed with the aim to integrate it into the ART system, with the view of making it suitable as a dialysis machine and compatible with other blood oxidation systems.

**Prof. Kost describes the platform:** "The platform is based on polymeric microbubbles MBs with a gas core, made from a PLGA shell (a biocompatible polymer), synthesized by a modified double emulsion solvent evaporation method".

**Dr. Udi Nussinovitch, MD, Ph.D., Co-Founder and CSO of Inspira,** said: "I believe that Inspira is developing groundbreaking technology from a medical device and biotechnological perspective. The joined technologies are intended to use innovative molecular approaches and novel oxygenation methods that have the potential to improve patients' outcomes."

### **About Inspira Technologies**

Inspira Technologies is an innovative medical technology company in the respiratory treatment arena. The Company has developed a breakthrough Augmented Respiration Technology, which it believes will elevate and stabilize patient oxygen saturation levels. The

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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 products have not yet been tested or used in humans and has not approved by the U.S. Food and Drug Administration (FDA).

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

## **Forward Looking Statements**

This press release contains express or implied forward-looking statements pursuant to U.S. Federal securities laws. For example, Inspira Technologies Ltd. Oxy B.H.N. Ltd. (the "Company") is using forward-looking statements when it discusses the development and potential of its platform designed to prevent blood clotting in its ART system, that the platform is intended to extend the life of oxidizers and potentially prevent blood clotting through its ART system, that the novel, proposed technology, if integrated into the ART system, may be suitable as a dialysis machine and compatible with other blood oxidation systems and the belief that the Company is developing groundbreaking technology from a medical device and biotechnological perspective. 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. The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements: changes in technology and market requirements; the Company's products may not be approved by regulatory agencies, the Company's technology may not be validated as it progresses further and its methods may not be accepted by the scientific community; the Company may be unable to retain or attract key employees whose knowledge is essential to the development of its products; unforeseen scientific difficulties may develop with the Company's process; the Company's products may wind up being more expensive than it anticipates; results in the laboratory may not translate to equally good results in real clinical settings; the Company's patents may not be sufficient; the Company's products may harm recipients; changes in legislation may adversely impact the Company; inability to timely develop and introduce new technologies, products and applications. 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 final prospectus filed with the Securities and Exchange Commission (the SEC"), which is available on the SEC's website, [www.sec.gov](http://www.sec.gov) and in any subsequent filings with the SEC.

## **For more details:**

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