



# inspira<sup>TM</sup>

Investor Presentation

August 2022

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# Forward looking-Statements

This presentation of Inspira™ Technologies Oxy B.H.N. Ltd. (“Inspira Technologies” or the “Company”) contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act and other securities law. Words such as “expects,” “intends,” “plans,” “believes,” “seeks,” “estimates,” and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses intended uses of its products and technology, its business model, its strategy for gaining market penetration and market share, the potential amounts to be derived from its distribution agreements, its go-to market strategy, potential strategic collaborations with third parties, its reimbursement strategy, regulatory submissions, market potential for its products, commercialization of its products, the potential to use its products together with mechanical ventilation, the regulatory approval process of its product candidates and the potential submission of approvals with such regulators, the benefits and uses of its product candidates for intended patient populations, lines of therapy, targeted major milestones for 2022-2023 and market milestones 2022-2023 and its future growth. The presentation also contains estimates with respect to the Company’s health economics model. Forward-looking statements are not historical facts, and are based upon management’s current expectations, beliefs and projections, many of which, by their nature, are inherently uncertain. Such expectations, beliefs and projections are expressed in good faith. However, there can be no assurance that management’s expectations, beliefs and projections will be achieved, and actual results may differ materially from what is expressed or indicated by the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. More detailed information about the risks and uncertainties affecting the Company is contained under the heading “Risk Factors” in the Company’s annual report on Form 20-F for the fiscal year ended December 31, 2021 filed with the U.S. Securities and Exchange Commission (the “SEC”), which is available on the SEC’s website, [www.sec.gov](http://www.sec.gov). Forward-looking statements speak only as of the date the statements are made. The Company assumes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws as well as subsequent filings with the SEC. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements.







We need to unlock your dependency on invasive mechanical ventilation



## The Respiratory Gap



# Respiratory Failure

Multiple Trends Propelling the Market in the Coming Years



Respiratory failure is a serious medical condition that develops when the lungs cannot get sufficient oxygen into the blood. Buildup of carbon dioxide can also damage the tissues and organs.

Acute respiratory failure can occur quickly and without much warning and often requires immediate emergency treatment<sup>1</sup>.



**Global Market Expected to Grow**

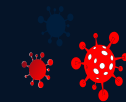
(Based on invasive mechanical ventilation market)



**Growing geriatric population**



**Increase in the prevalence of respiratory diseases**



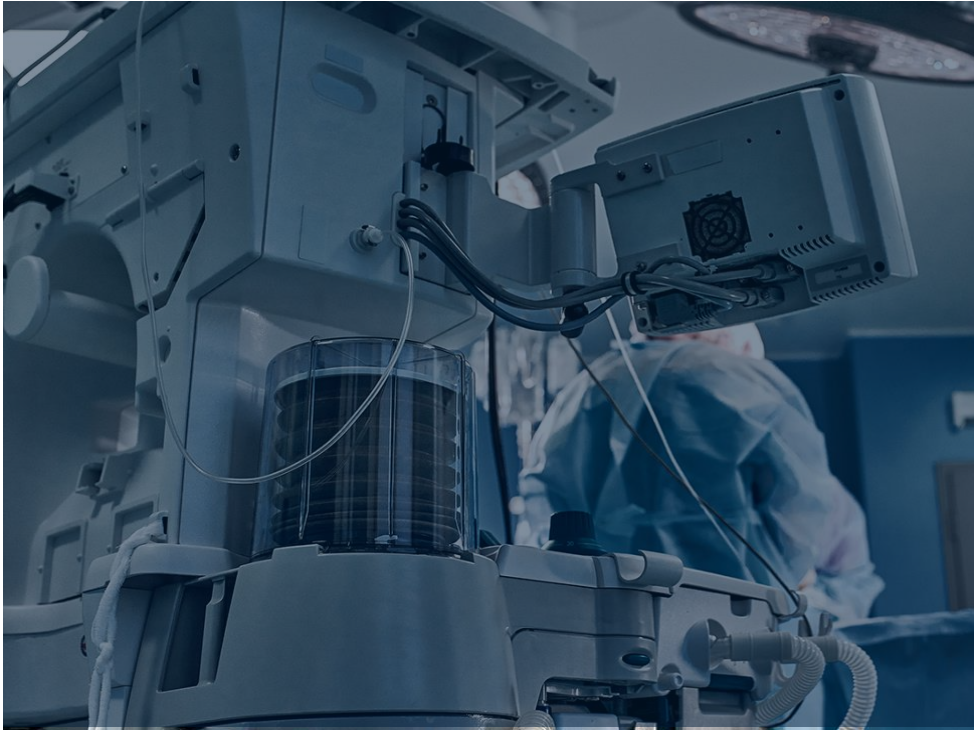
**Respiratory comorbidities following COVID-19**

1. National Heart, Lung and Blood Institute website. <https://www.nhlbi.nih.gov/health-topics/respiratory-failure>





# Mechanical Ventilation (MV) Puts Patients at Risk<sup>1-3</sup>



MV requires intrusive intubation, coma induction, and can be very traumatic for patients:

## Potential Risks & Complications

- Ventilator-induced lung injury (VILI)
- Ventilator-associated pneumonia (VAP)
- Ventilator-induced diaphragmatic dysfunction
- Pneumothorax & tracheomalacia
- Increased Delirium
- Muscular atrophy
- Drug withdrawal symptoms

## High Cost of Treatment

- Prolonged duration of Ventilation
- Prolonged ICU stay
- Increased complication rate
- Patient re-admissions
- Requires weaning process
- Extended rehabilitation period

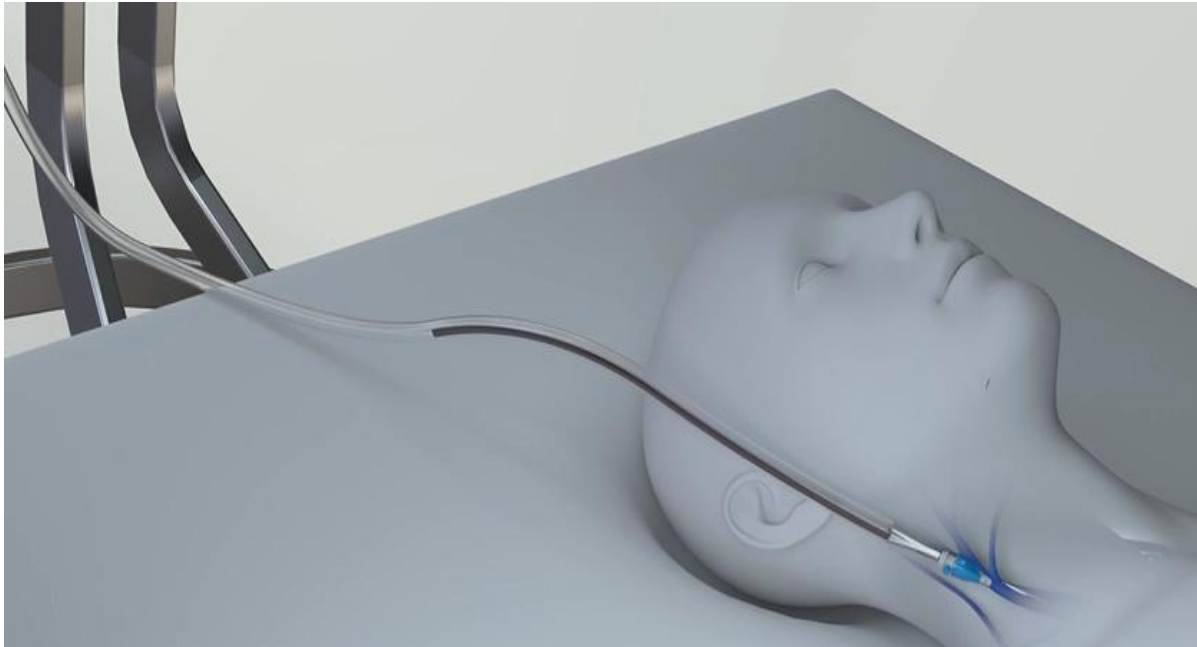
1. Am J Respir Crit Care Med Vol. 196, P3-4, 2017. ATS Patient Education Series © 2017 American Thoracic Society

2. Diling Wu et al. Frontiers in pharmacology MINI REVIEW published: 09 May 2019. doi: 10.3389/fphar.2019.00482

3. Kalil AC, Metersky ML, Klompas M, et al. Management of Adults With Hospital-acquired and Ventilator-associated Pneumonia: 2016 Clinical Practice Guidelines by the Infectious Diseases Society of America and the American Thoracic Society. Clin Infect Dis. 2016;63:e61-e111.



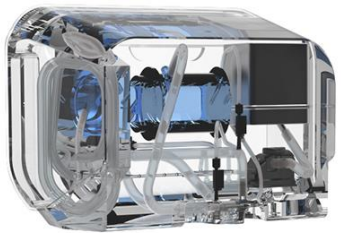
# Augmented Respiratory Technology (Inspira ART™)



- Aims to reduce the need for invasive mechanical ventilation (IMV) with the potential to reduce risks, complications and high costs
- Targets for patient to remain awake & spontaneously breathing
- Will be designed to utilize direct blood oxygenation to boost patient saturation levels within minutes
- Anticipates to allow for larger patient populations in and beyond ICU settings

# Business Model

## Go To Market Strategy



Inspira ART system



Disposable kit

### Clinical Activity

- ☐ Clinical studies at Leading World-Renowned Hospital

### Compliance

- ☐ Food and Drug Administration (FDA) Regulatory Process
- ☐ Reimbursement Coding

### Market Penetration

- ☐ First deployment at leading medical centers
- ☐ Multi-Location Deployment

### Sales & Growth

- ☐ Strategic collaboration with industry leaders (Medical Device Companies or Other)
- ☐ Distribution Agreements

# Market Opportunity By Product\*

## Inspira ART™ System



This respiratory support technology targeted to perform direct blood oxygenation and CO2 removal to boost patient saturation levels within minutes. The designed treatment is intended for longer than 6 hours, providing assisted extracorporeal circulation and physiologic gas exchange of the patient's blood in adult patients with acute respiratory failure. The system is targeted to allow for treatment of patients while awake and spontaneously breathing.

**Treatment setting:** ICUs & Hospital Units  
**FDA Pre-Submission H2-2023**

## HYLA™ Blood Sensor



A non-invasive blood sensor to be designed to perform real-time and continuous blood measurements, potentially minimizing the need for blood samples from patients. The HYLA's measurement shall be designed to assist physicians in the monitoring of a patient's clinical condition.

**Treatment setting:** Operating Theaters, Hospital Units  
**FDA Submission date to be defined**

## ALICE™ Device



Life Support - The Alice™ System (previously identified as the Liby™ or ECLS system) is designed as a cardiopulmonary bypass (CPB) or heart-lung bypass device designed to do work of providing the body blood & oxygen when heart is stopped for a surgical procedure up to 6hrs.

**Treatment setting:** Operating Theaters  
**FDA Submission H2-2023, Planning FDA Class II 510(k)**



# Planned Milestones 2022-2023

## Distribution Agreements



Signed Agreement in U.S. for future deployment\* of Inspira™ ART Systems



Signed Agreement in IL for future deployment\* of Inspira™ ART Systems



Signed Agreement in U.S. for future deployment\* of HYL A™ Blood Sensors



New Region

## Strategic Collaborations



Leading World Renowned Hospital



Manufacturing Agreement



Licensing Agreement



HYL A™ Blood Sensor

## New Technology & Product Reveals



ALICE™ System



HYL A™ Blood Sensor



New Tech Device



Inspira™ ART System

## Clinical Studies



Commencement of HYL A™ Study



Results of HYL A™ Study



Commencement of New Product Study



Results of New Product Study

## FDA Submissions



ALICE™ System



Inspira™ ART System (2023/2024)

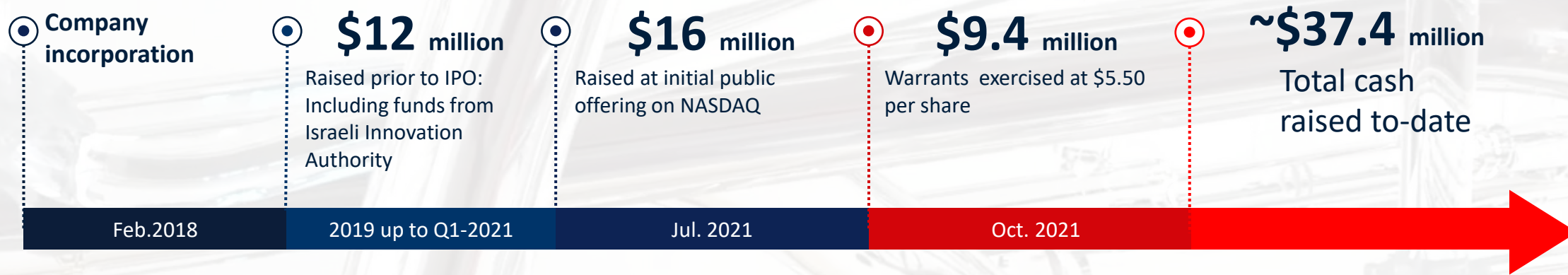


Inspira DL Cannula (2023/2024)



Inspira Disposable Kit

# Inspira Cash Management



**\$21.7 million, Cash on hand as of March 31, 2022**

**\$0.8 million, H1-2022 average monthly burn-rate**

# Experienced Leadership Team



**Prof. Benad Goldwasser, MD, MBA**  
Chairman

**Multiple well-known industry exits**



**Dagi Ben-Noon, BSc**  
Co-Founder, Director & CEO

**Co-founder of Nano Dimension**  
**Nasdaq: NNMD**



**Joe Hayon, MBA**  
Co-Founder, Director, President & CFO

**M&A experience & track record**

- **Elscent Technologies**
- **Arazim Advanced Technologies**



**Avi Shabtay, BSc**  
COO

**25 yrs of startup development experience**



**Daniella Yeheskely-Hayon, PhD**  
CTO

**13 yrs development experience**

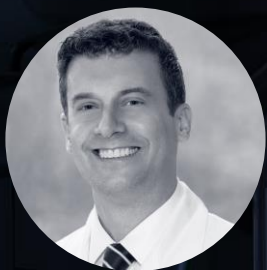


**Yafit Tehila, CPA**  
VP Finance & Legal

**Experience with public companies**



# Scientific Advisory Board - Several world-renowned KOLs



**Prof. Daniel Brodie**  
Intensivist & ECMO Advisor

President-elect of the Extracorporeal Life Support Organization (ELSO). Chairman of the Executive Committee of the International ECMO Network (ECMONet)



**Prof. Eddy Fan**  
Intensivist & ECMO Advisor

Medical director of the extracorporeal life support program at the Toronto General Hospital. Intensivist at the University Health Network/Mount Sinai Hospital



**Dr. Stephan Ledot**  
Intensivist & ECMO Advisor

World-renowned expert in critical care, ECMO, anesthesia and echocardiography. Fellowships in ECMO at the NHS, UK and cardiothoracic anesthesia at Harefield Hospital



**Dr. Yigal Kasif, MD**  
ECMO Advisor

Chairman of the Israel ECMO Society. Director of ECMO program at Sheba Medical Center. Surgeon, Specializing in Adult Cardiac Surgery, Heart Transplantation and Assist Devices.

# You Need to be Conscious of Your Potential Alternatives





THANK YOU