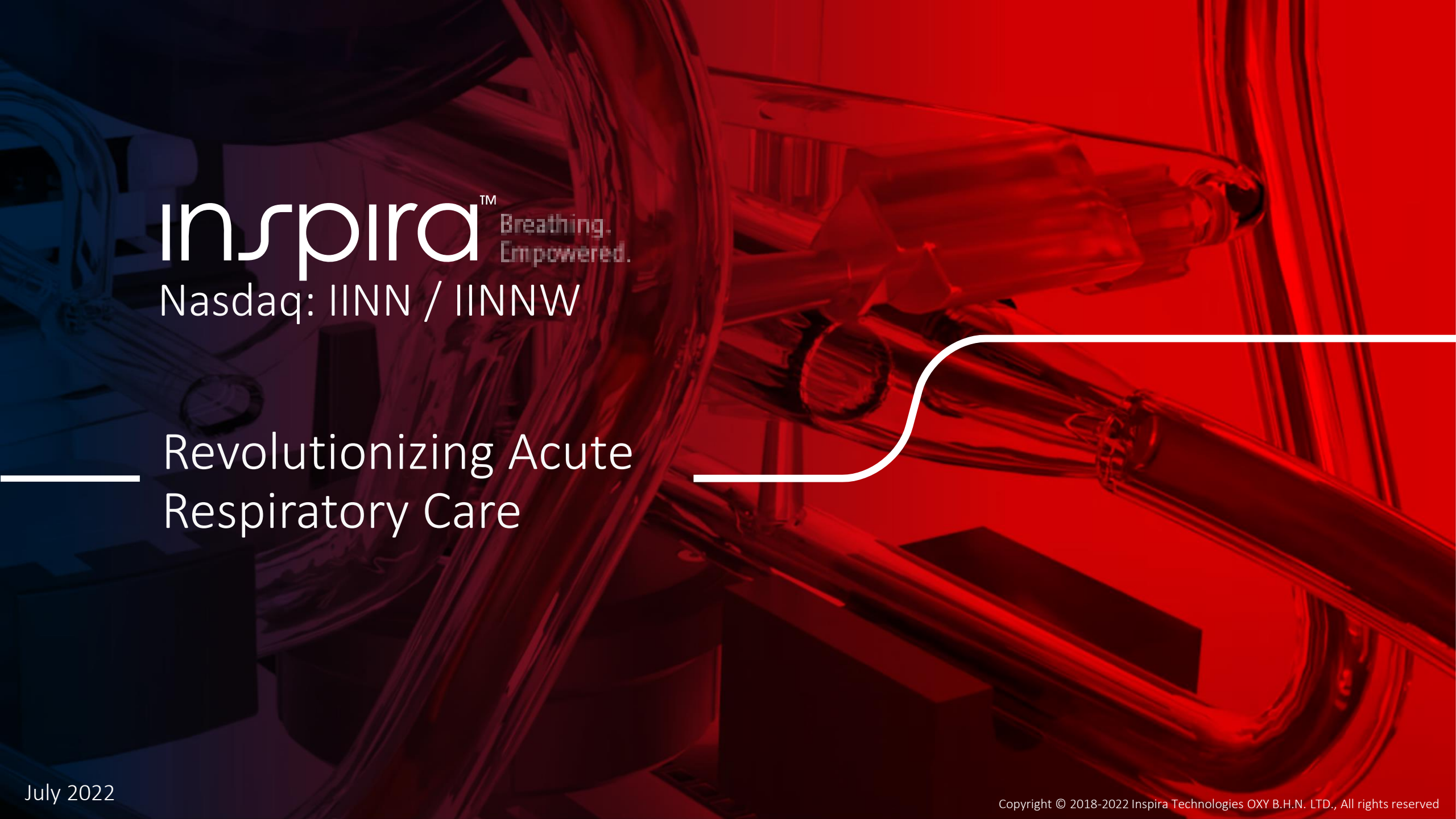

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Nasdaq: IINN / IINNW

Revolutionizing Acute Respiratory Care

July 2022

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 its vision and mission, the potential of its product, market penetration and gaining market share, its reimbursement strategy, regulatory submissions, market potential for its products, commercialization of its product, the potential to use its product together with mechanical ventilation, reimbursement strategy for its product, regulatory approval process of its product candidates, the benefits and use of its product candidates''intended patient population, lines of therapy 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. For a more detailed description of the risks and uncertainties affecting the Company, the reference is made to the Company's reports filed from time to time with the Securities and Exchange Commission (the "SEC"), including, but not limited to, the risks detailed in the Company's preliminary prospectus dated, 2021, filed with the SEC as a part of the Company's Registration Statement on Form F-1 (File No. 333- 253920), and documents incorporated by reference therein. 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.

Investment Highlights

A novel therapy
Revolutionary early-stage extracorporeal respiratory support system, intended to rebalance oxygen saturation levels[1] and carbon dioxide levels in non-invasive ventilation patients with acute respiratory failure to minimize the need for invasive mechanical ventilation.

Forecasting growth
The potential market for the company is expected to grow steadily in the coming years due to the increasing prevalence of chronic disorders, growing geriatric population which is typically at high risk of acute respiratory failure, the COVID-19 pandemic and its long-term comorbidities (Based on the number of patients being treated with invasive mechanical ventilation)[2].

Evidence-based Pre-Clinical studies
Initial pre- clinical studies (In-vivo) performed on swine model demonstrated the ART's unique capabilities to rebalance saturation levels by oxygenating the blood and removing excessive CO2 in a significant manner[3].

Increase pipeline for future orders
The company has secured 4 strategic agreements for the deployment of the ART system in Spain, Portugal, Poland, Czech Republic, Slovakia, Israel and six states in the U.S.: Texas, New Jersey, New York, Florida, North Carlina and South Carolina. Agreement signed targets up to $401 million over a 7-year period, subject to regulatory approval.

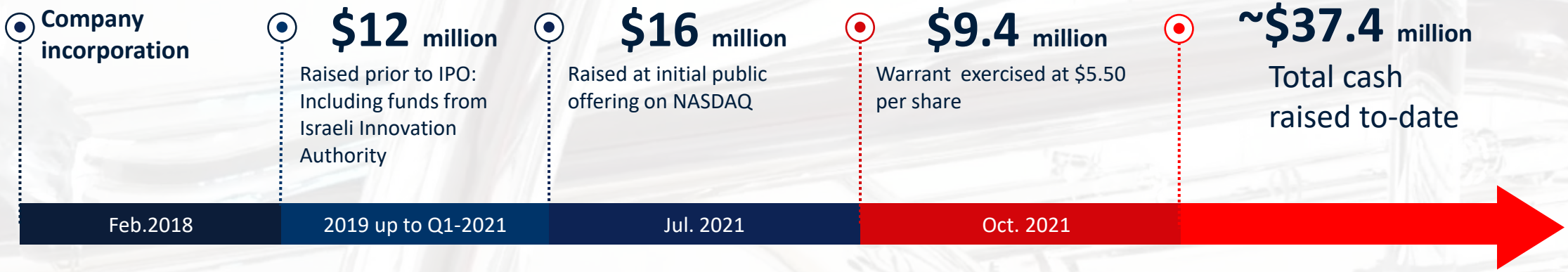
1. Oxygen saturation levels measure the degree to which the hemoglobin contained in the red blood cells (erythrocytes) has bonded with oxygen molecules. Oxygen is taken in by the lungs when we breathe in.
2. Invasive mechanical ventilation, MARKET ANALYSIS & SEGMENT FORECAST FOR 2021 AND FROM 2022 TO 2028, Grand View Research 2021, pages 25-38.
3. During 2019-2020, in August 2020, and in November 2021, animal studies were performed in swine model at LAHAV CRO in Israel.

Targeted medical Device companies

HAMILTON MEDICAL · GETINGE · Medtronic · SIEMENS Healthineers · GE Healthcare · BD · Smith Worldwide Medical Products · PHILIPS · Baxter · ResMed

* Trademarks are the property of their respective owners.

Inspira Cash Management



$21.7 million, On-hand cash 31.03.2022

$0.7 million, Q1-2022 Average Monthly Burn-rate

Vision

Redefining Artificial Respiration to impact millions of lives

Our mission is to provide an alternative to invasive mechanical ventilation for acute respiratory patients who continue to deteriorate while being treated with non-invasive ventilation treatment.

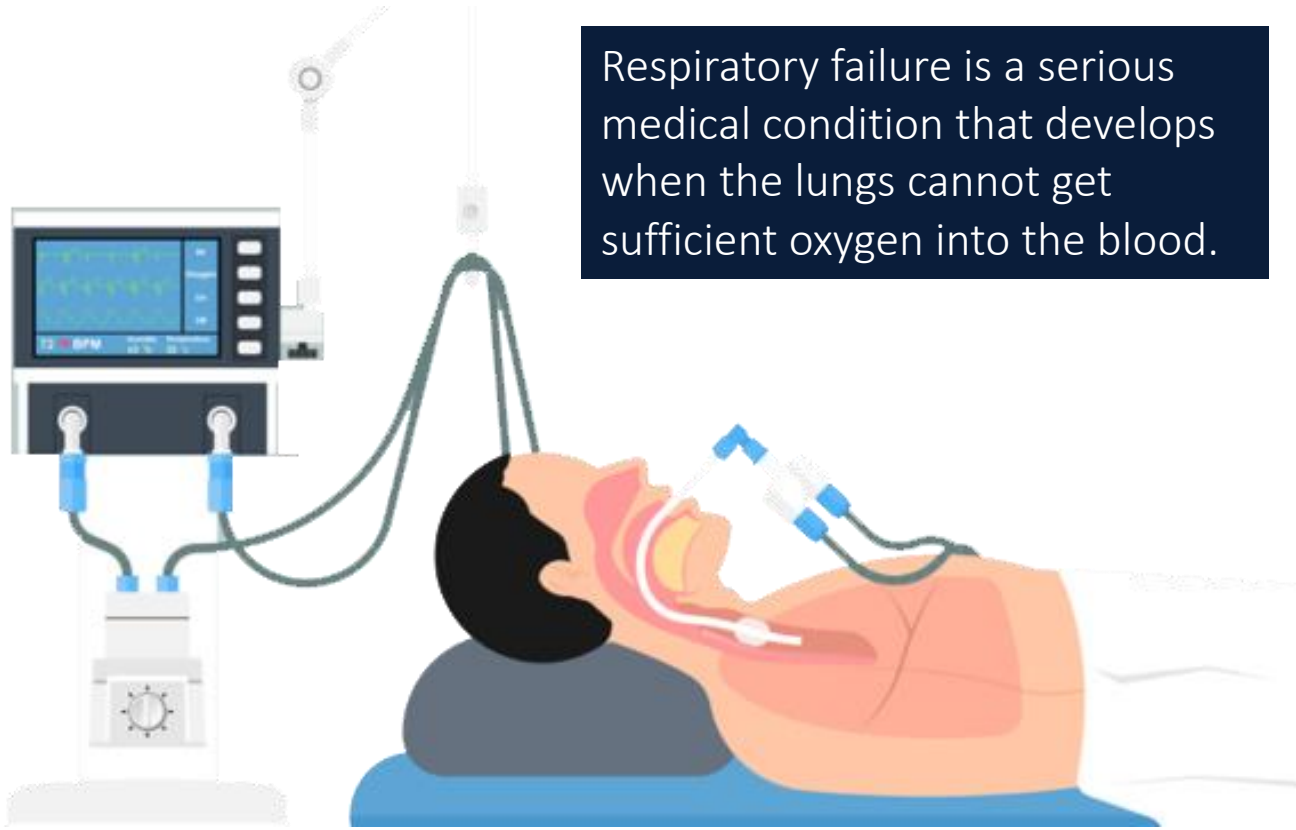
- **Non-invasive ventilation (NIV)** - is the delivery of oxygen (ventilation support) via a face mask and therefore eliminating the need of an endotracheal airway.
- **Invasive mechanical ventilation** - is positive pressure delivered to the patient's lungs via an endotracheal tube or a tracheostomy tube.

Respiratory Failure
The Unmet Need

Respiratory Failure - Definition

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 and further impair the oxygenation of blood and, as a result, reduce the amount of oxygen delivered to the tissues.

Acute respiratory failure can occur quickly and without much warning. It is often caused by a disease or injury that affects breathing, such as pneumonia or a lung or spinal cord injury. Acute respiratory failure requires immediate emergency treatment[1].



Respiratory failure is a serious medical condition that develops when the lungs cannot get sufficient oxygen into the blood.

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

Mechanical Ventilation for Treating Patients With Acute Respiratory Failure Has Significant Downsides[1–3]

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
- Oxygen toxicity of the lung
- Delirium
- Muscular atrophy

High Cost of Treatment

- Long hospital stays
- 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.

Acute Respiratory Failure: Current Treatment Paradigm

Acute Respiratory Failure

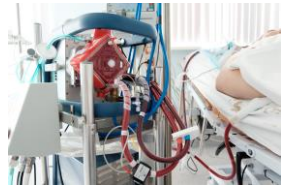
Hypoxemia | **Hypercarbia** | **Hypoxemia & Hypercarbia**

Non-Invasive Ventilation[1]

- Nasal mask
- Face mask
- Nasal plugs
- BIPAP CPAP
- Oxygen Helmet
- HFNC (High Flow Nasal Cannula)

Invasive ventilation[2]

Mechanical Ventilation



ECMO[3]

Extracorporeal Membrane Oxygenation

RESPIRATORY DETERIORATION

TREATMENT ESCELATION

1. A Grade 2C recommendation is a very weak recommendation; other alternatives may be equally reasonable.
2. Brown 3rd CA, Walls RM. The decision to intubate. In: The Walls Manual of Emergency Airway Management, 5th ed, Lippincott Williams & Wilkins, Philadelphia 2018. p.3.
3. https://www.elso.org/Portals/0/ELSO%20Guidelines%20General%20All%20ECLS%20Version%201_4.pdf (Accessed on July 23, 2018).

inspira™

Inspira Technologies is developing a minimally invasive, cost-effective early-stage extracorporeal blood oxygenation system that utilizes a proprietary hemo-protective flow technology to rebalance oxygen saturation levels in order to minimize the need for invasive mechanical ventilation.

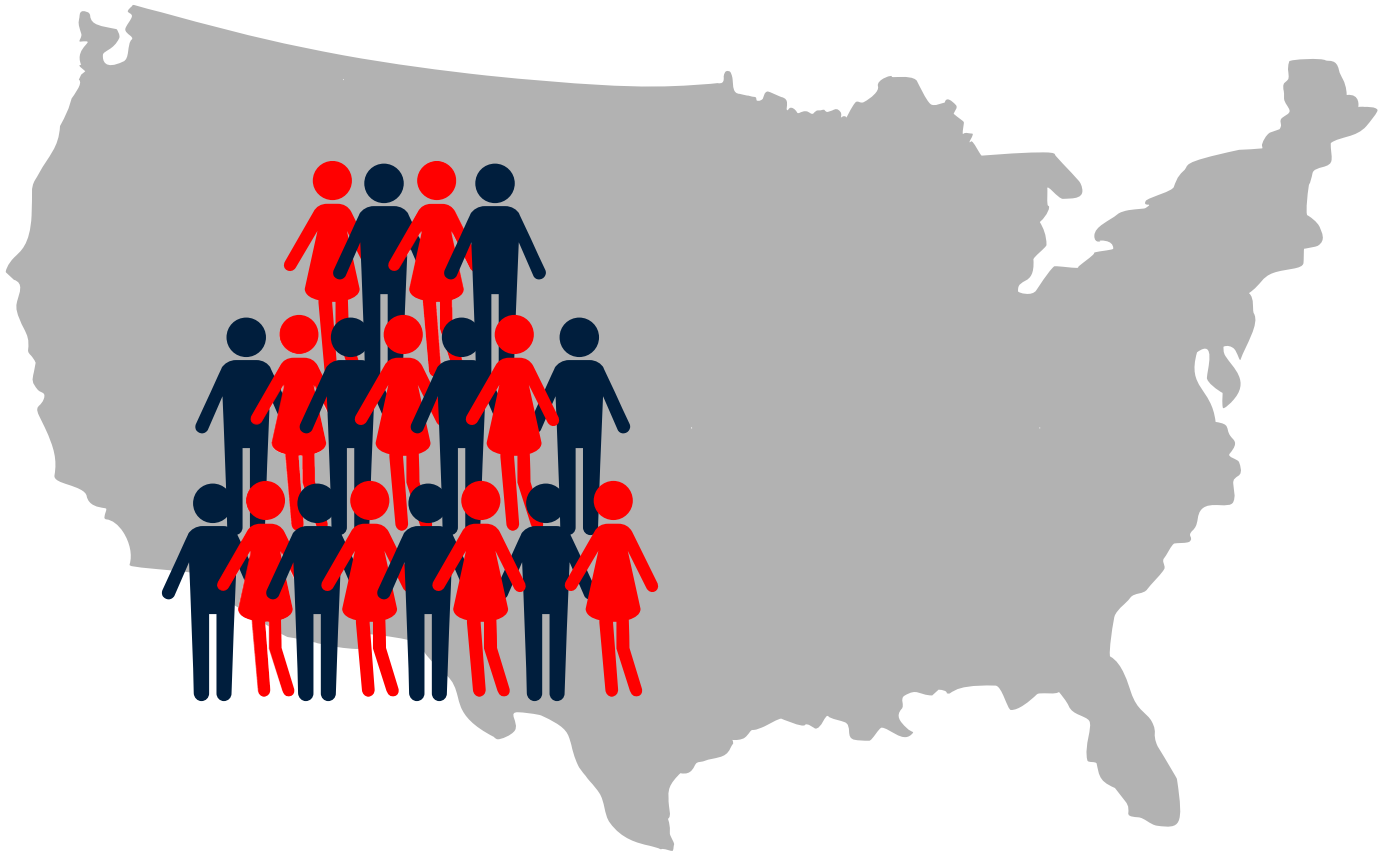
inspira™ Breathing. Empowered.

Market Potential

- The U.S. Market
- Multiple trends propelling the market
- COVID-19 and growing medical community experience with extracorporeal respiratory systems is expected to accelerate market adoption

Potential Market Size in the U.S. (Primary Market)

The ~633,000 acute respiratory failure patients in the U.S. each year, are Inspira's target population for the ART system[1]. With current treatments they continue to deteriorate following non-invasive ventilation treatment, are intubated, anesthetized, and put on invasive mechanical ventilation[2].



Etiologies: ARDS, Pneumonia, Sepsis, COPD and acute Asthma patients

1. Kempker, Jordan A. MD, MSc et al. "The Epidemiology of Respiratory Failure in the United States 2002–2017: A Serial Cross-Sectional Study". Critical Care Explorations: June 2020 - Volume 2 - Issue 6 - p e0128
2. Invasive Mechanical Ventilation Market. MARKET ESTIMATES & TREND ANALYSIS FROM 2016 TO 2028. Grand View Research

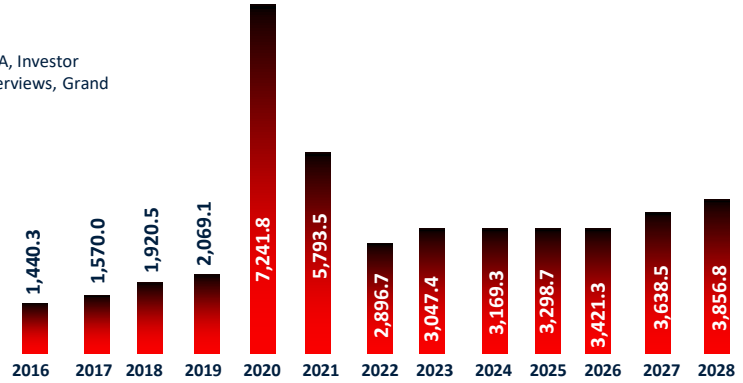
Multiple Trends Propelling the Market in the Coming Years

U.S. Market is Expected to Grow Steadily – A stable growth is expected

(Based on invasive mechanical ventilation market – Inspira's patient population target market)

The global mechanical ventilators market size was valued at $7.24 billion in 2020 and is expected to record a CAGR of 4.9% from 2022 to 2028.

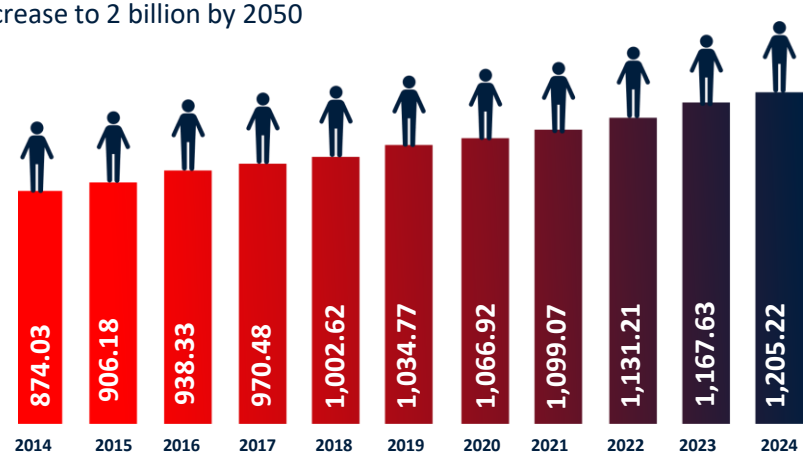
Source: WHO, U.S CDC, FDA, Investor Presentations, Primary Interviews, Grand View Research



Growing geriatric population

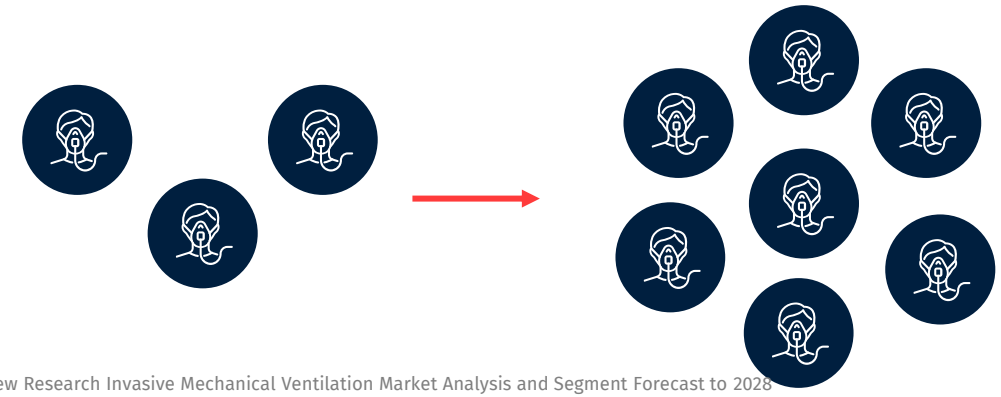
According to estimates published by the WHO, the global population aged 60 years and above is expected to increase to 2 billion by 2050

Source: United Nations, Grand Research



Increase in the prevalence of respiratory diseases

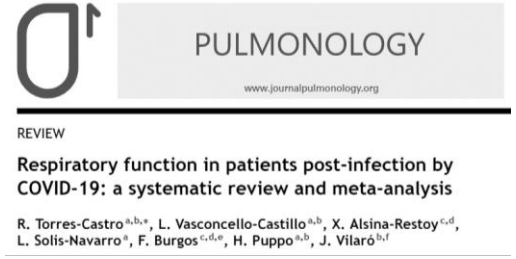
One of the key driving factors for invasive mechanical ventilation is the rising prevalence of respiratory diseases, which is expected to have a significant impact on the market.

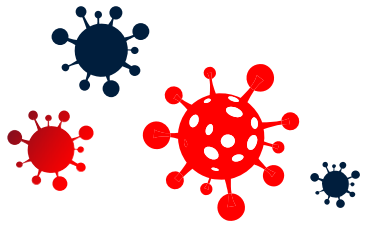


Grand View Research Invasive Mechanical Ventilation Market Analysis and Segment Forecast to 2028

Respiratory comorbidities following COVID-19

"Post-infection COVID-19 patients showed impaired lung function; the most important of the pulmonary function tests affected was the diffusion capacity[1]".


PULMONOLOGY
www.journalpulmonology.org
REVIEW
Respiratory function in patients post-infection by COVID-19: a systematic review and meta-analysis
R. Torres-Castro[a,b,*], L. Vasconcello-Castillo[a,b], X. Alsina-Restoy[c,d], L. Solis-Navarro[a], F. Burgos[c,d,e], H. Puppo[a,b], J. Vilaró[b,f]



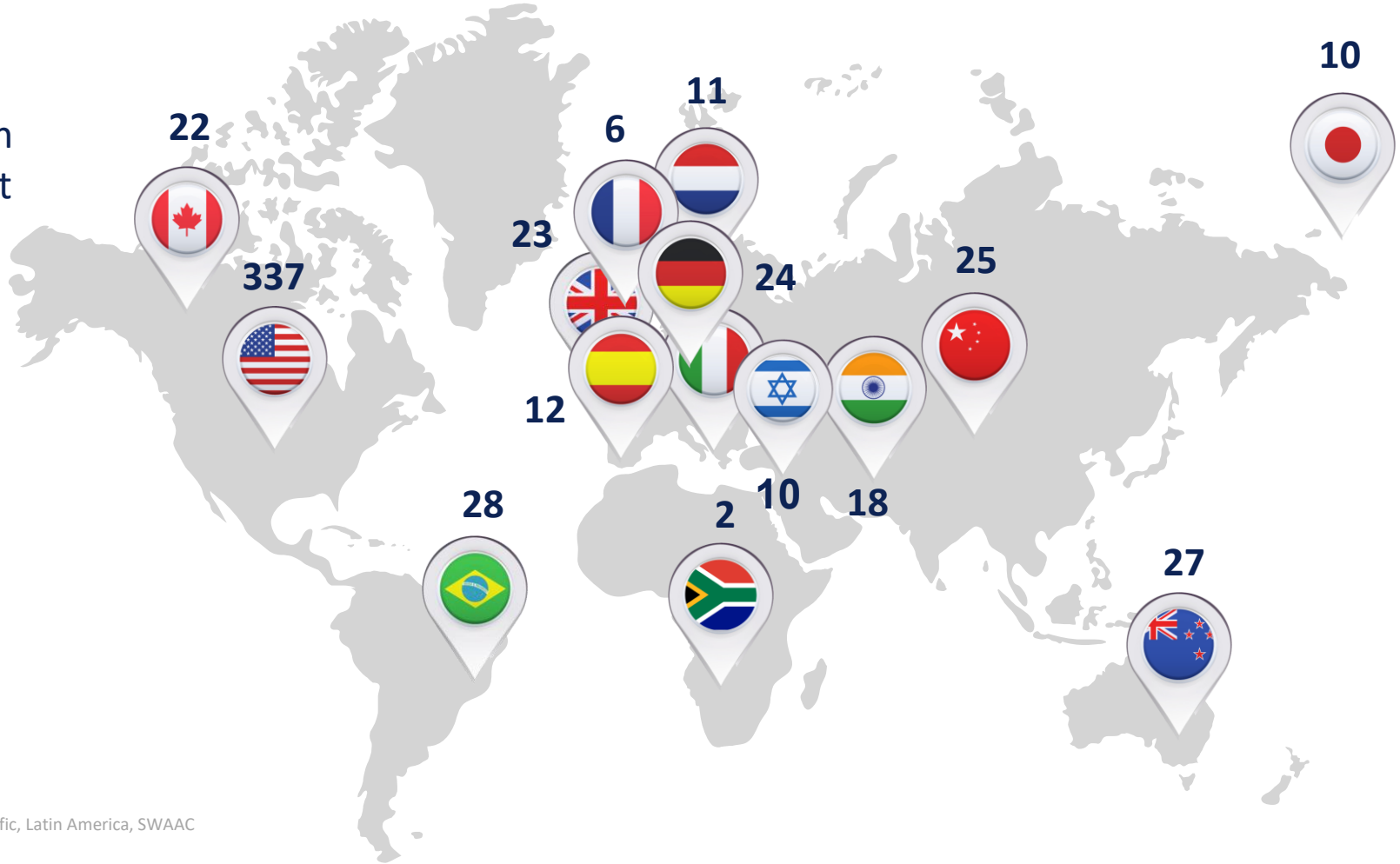
1. R.Torres-Castro et al. "Respiratory function in patients post-infection by COVID-19: a systematic review and meta-analysis". Pulmonary, Volume 27, Issue 4, Pages 281-382 (July–August 2021)

Experience Gained by the Medical Community with ECMO Following COVID-19 May Potentially Facilitate Faster Adoption of ART™

In the last 5 years, 26,582 adults with pulmonary diseases were treated with VV-ECMO (international data) as a last resort treatment[1]

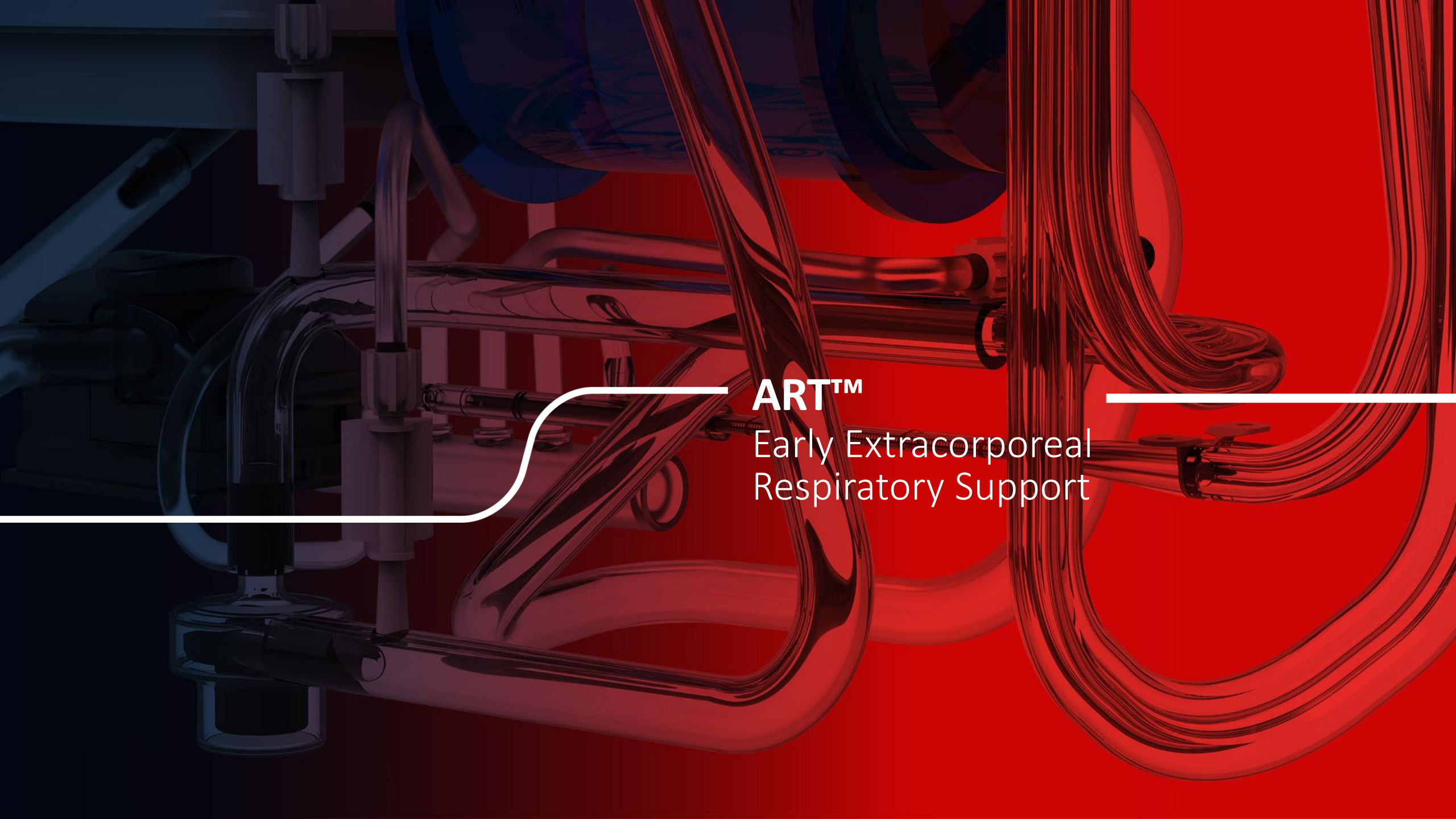
717 hospitals in the world have experience with ECMO[2]

North America - 359
Europe – 178 (During COVID-19)



ECMO = extracorporeal membrane oxygenation

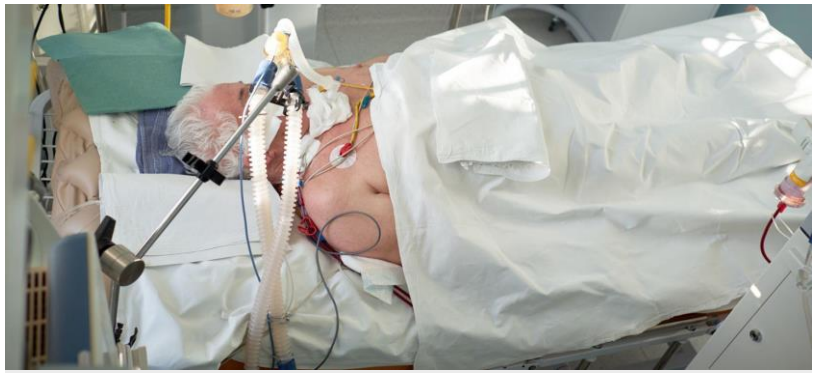
1. ELSO Registry Dashboard. Data included patients from North America, Europe, Asia Pacific, Latin America, SWAAC
2. https://www.elso.org/Registry/SupportDocuments/CenterIDList.aspx



ART™

Early Extracorporeal Respiratory Support

A New Approach to Minimize the Need for Mechanical Ventilation



Mechanical Ventilation

IV sedation
Intubation
Artificial Respiration
Ventilator Associated Complications
Weaning
Discharge

Inspira's ART™ System*

Awake Patient
Cannula Insertion
Hemo-protective extracorporeal treatment
Discharge

*These photos are for illustration purposes only. The Company's product has not yet been tested or used in humans and has not been approved by the CE and the U.S. Food and Drug Administration (FDA).

About ART™

Extracorporeal approach
A system specifically designed to provide continuous low-flow venous-venous early-stage extracorporeal respiratory support

Cannula is designed to draw blood at a rate of 1-1.5L per minute[1]

Rebalancing oxygenation saturation levels & CO2 removal
O2 saturation level is raised in minutes[2]

Hemo-protective low flow approach
Designed to reduce clotting and hemolysis

Compact & portable
Designed for ICUs, general medical wards & ambulatory settings

1. In adult patients
2. In August 2020, animal studies were performed in swine model at LAHAV CRO in Israel. 25 hypoxemic events were induced, in order to test ARTs' oxygenation and carbon dioxide removal capabilities. In 20 out of the 25 hypoxemic events induced, ART treatment was provided with a blood flow rate of 1 liter per minute.

ART™ Treatment - Possible Indications

ART™ may be used for the treatment of acute respiratory failure patients suffering from hypoxemia and hypercarbia or both, **who continue to deteriorate while being treated with non-invasive ventilation treatment.**

Pneumonia

Asthma

Acute **R**espiratory **D**istress **S**yndrome

Chronic **O**bstructive **P**ulmonary **D**isease

To date, 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) or the CE or other required regulatory agencies.

The ART™ System

How does it work?

INSERT

Dual lumen cannula inserted into the jugular vein

WITHDRAW

Utilizing hemo-protective flow technology, the blood is treated with a minimum drop in blood pressure & a low sheer force, protecting the red blood cells

ENRICH

Blood is enriched with high concentrations of oxygen, and CO2 is removed

CIRCULATE

The enriched blood is returned to the patient via the dual lumen cannula

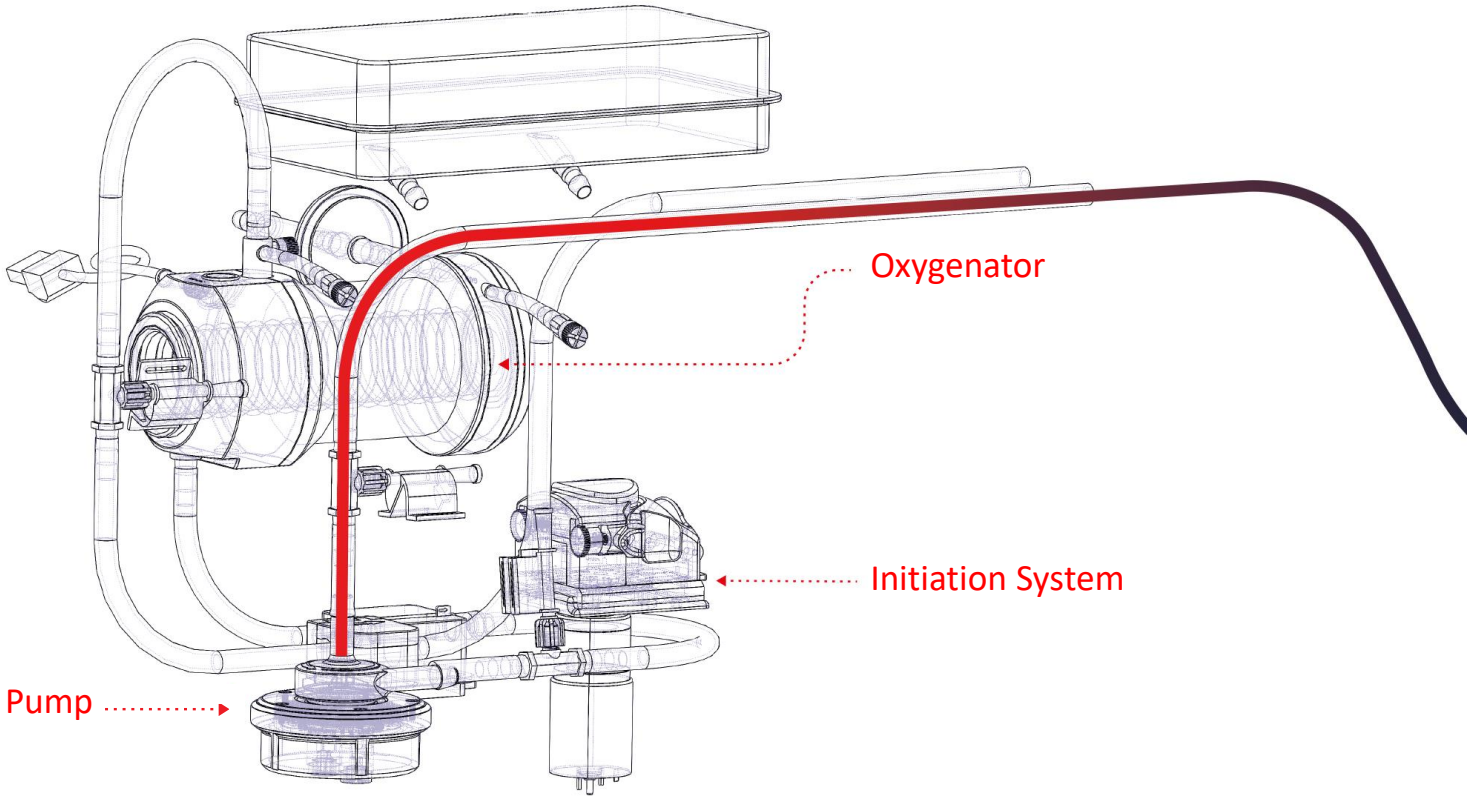
REBALANCE

The returned enriched blood rebalances the patient's saturation levels, reducing the burden on the lungs

THE ART™ – Hemo Protective System

The ART System is a medical device including a replaceable disposable respiratory support unit (kit) for each patient treatment.

The ART's design supports the company's strategic business model to encourage the extension of acute respiratory care **beyond the ICU.**



ART™ System Primary Components

Dual Lumen Cannula

Component:
Dual lumen cannula, with small diameter (16-21Fr*) designed to draw blood at a rate of 1-1.5 Liter per minute**

Hemo-Protective Flow Pump

Component:
Proprietary hemo-protective pump; designed to prevent hemolysis and thrombosis

Initiation System

Component:
Autonomous initiation system for self-priming of the entire blood circuit , potentially eliminating the need for a perfusionist***

* The diameter of the cannula depends on the flow volume required to perform the treatment. As the volume of flow decreases, the cannula diameter is reduced accordingly
** In August 2020, an animal study was performed in swine model at LAHAV CRO in Israel.
*** Perfusionist - operates a heart-lung machine (extracorporeal respiratory system), which is an artificial blood pump, which propels oxygenated blood to the patient's tissues (Britannica.com)

ART™ System Primary Components

Disposable Respiratory Support Unit (kit)

Component:
Plug-and-play disposable cartridge. suitable for deployment in both in ICUs and in general medical unit settings

Control unit

Component:
An algorithm enhanced digital platform, controls and displays all sensor data via an interactive Graphical User Interface

The HYLA™ Blood Sensor

Component:
The HYLA™ blood sensor is expected to continuously measure key indicators such as the levels of partial oxygen and carbon dioxide pressures. The sensor is attached to the tube, while blood is flowing through the tube either venous or arterially.

ART's Innovative Features

Hemo-protective flow technology aimed to reduce the risks of hemolysis & thrombosis

Single insertion point of dual-lumen cannula will potentially be lowering the risk of multiple infections & bleeding

Eliminates the need for a perfusionist

Proprietary plug-and-play replaceable disposable unit expected to reduce need for ICU-Level staff

Self-priming capability designed to reduce operational errors and need for perfusionist

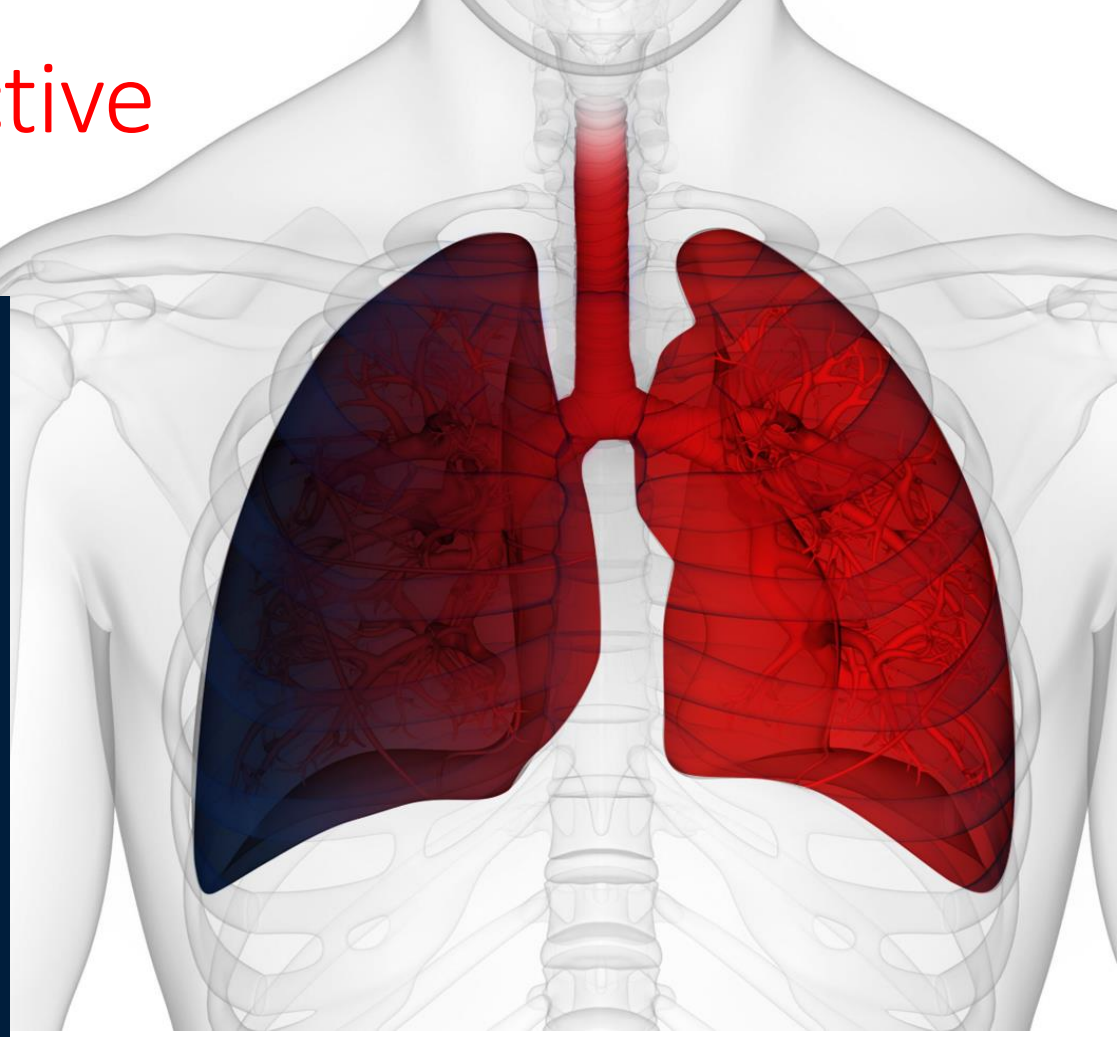
- **Hemolysis** –breakdown or destruction of red blood cells so that the contained oxygen carrying pigment hemoglobin is freed (dissolves) into the surrounding medium[1]
- **Thrombosis** – formation of a blood clot in the heart or in a blood vessel[2]
- **Perfusionist** - operates a heart-lung machine (extracorporeal system), which is an artificial blood pump, which propels oxygenated blood to the patient's tissues[3]

1,2 – Britannica.com | 3.www.explorehealthcarees.org

ART's Proprietary Hemo-Protective Flow Technology Features

Blood protection

ART's designed features	Hemolysis reduction	Thrombosis reduction
A unique Low flow-velocity ratio maintained throughout blood passage in disposable kit	V	V
A low-volume oxygenator		V
Pump head designed for low flow	V	V
Short dual lumen cannula design	V	
Entire disposable kit is coated with anticoagulants		V



1-1.5 liters of blood are being enriched with oxygen, rebalance patient's oxygen saturation levels in minutes[1]

Hemolysis –breakdown or destruction of red blood cells so that the contained oxygen carrying pigment hemoglobin is freed into the surrounding medium[2]
Thrombosis – formation of a blood clot in the hart or in a blood vessel[3]

1. In August 2020, animal studies were performed in swine model at LAHAV CRO in Israel.
2-3. www.Britannica.com

ART's Respiratory Support System Potential Benefits

The patient's perspective

- Immediate oxygen saturation elevation
- No need for induced coma
- Decreased work of breathing - Improving compliance to High Flow Nasal Cannula
- Patient can communicate their symptoms and needs to the medical team
- Avoiding some forms of complications associated with MV

The clinician's perspective

- Clinicians would be able to offer an alternative to mechanical ventilation
- Minimal learning curve
- Self priming system, can potentially minimize the need for perfusionist
- Self priming system results in less human errors
- Designed for use in ICUs, general wards & ambulatory settings

The hospital perspective

- Reduced costs and staff burden associated with MV complications
- Increased patient throughput
- New level of acute respiratory care available outside of ICUs
- Reduction of patient load in ICU
- Reduced staffing - No need for perfusionists
- No need for surgical access team

ART™ System Offers Two Intervention Modalities

	Prevention of mechanical ventilation	Shortening mechanical ventilation duration
When	Patients who continue to deteriorate while being treated with non-invasive ventilation treatment would be treated with ART	Mechanically ventilated patients would be treated with ART shortly following the initiation of mechanical ventilation
Objectives	1. Prevent mechanical ventilation 2. Avoid, VILI *(Ventilator-induced lung injury)* ,VIDD (*Ventilator induced diaphragmatic dysfunction)* and VAP *(Ventilator-associated pneumonia)*	1. Shorten mechanical ventilation period 2. Reduce VALI, VIDD and VAP
Where	**ICU** **General Medical ward**	**ICU**

What Differentiates ART from ECMO?

ART™ System

ART has the potential to prevent invasive mechanical ventilation and its associated long-term damages

ART is designed to allow for early intervention

One (16-21 fr) dual lumen cannula, will be used to withdraw and return 1-1.5 liters of blood per minute

Patients may be awake and spontaneously breathing

Since ART's target population consists of patients who are candidates for mechanical ventilation, its market size may resemble that of invasive mechanical ventilation

ECMO*

ECMO is a salvage therapy

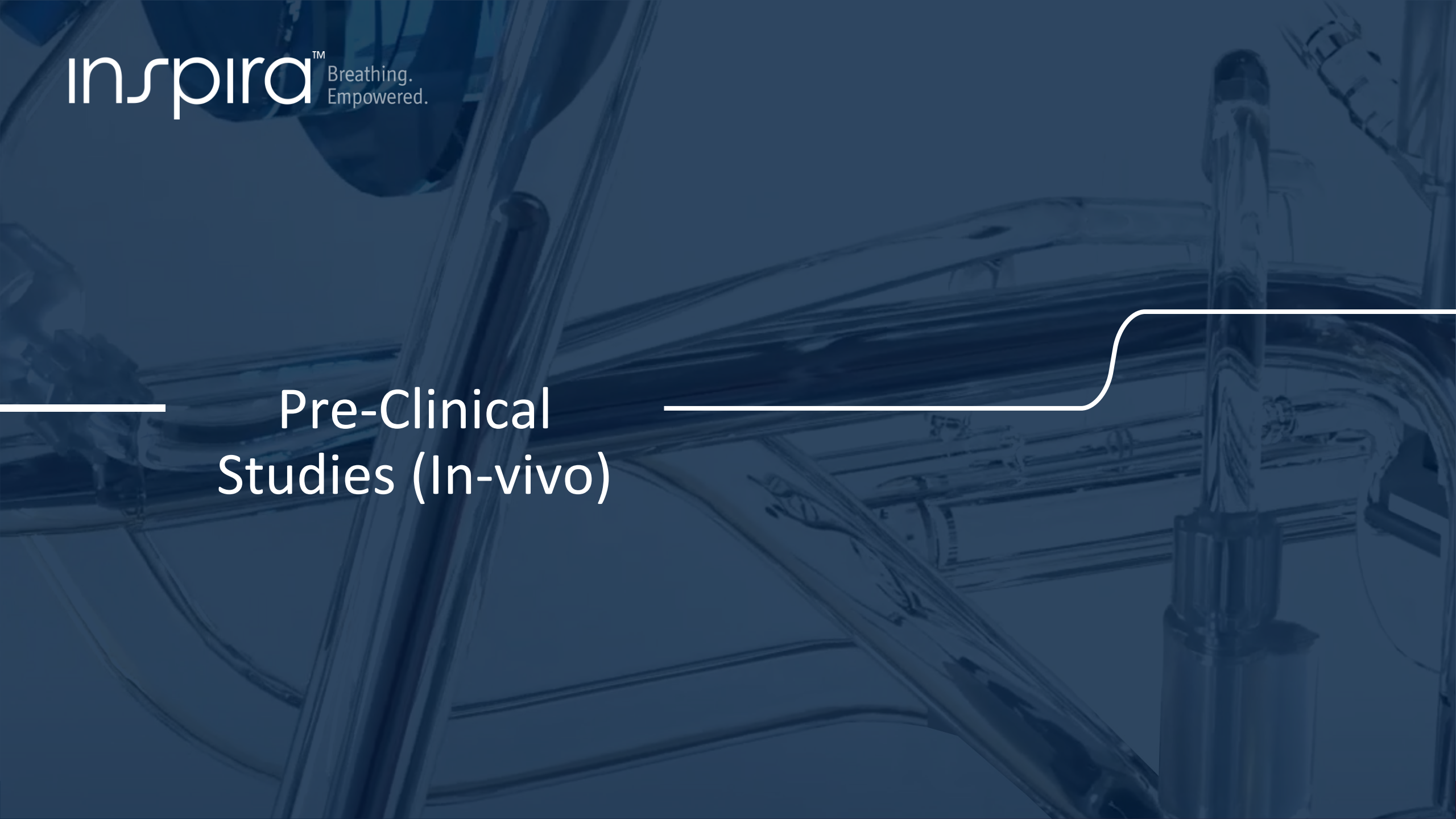
There is no “plan B ”when a patient is not improving with ECMO

Two single lumen cannulas - Typically, two large (21-25 fr) single lumen cannulas are used to withdraw and return 5-7 liters of blood per minute

Patients are sedated and paralyzed

The number of patients treated with ECMO is limited since it’s a salvage therapy used as a last resort treatment

* https://www.elso.org/Portals/0/ELSO%20Guidelines%20General%20All%20ECLS%20Version%201_4.pdf (Accessed on July 23, 2018)



Pre-Clinical Studies (In-vivo)

Studies Results Highlights

- ART treatment in hypoxemic swine model, resulted in significant increase of oxygen saturation by 8%-10%
- A flow of 1 liter per minute, was sufficient to provide a saturation increase of 8-10%
- Pulmonary artery saturation increase is attributed to ART device activity. Documented saturation values in the Pulmonary artery represent ART activity as it captures oxygenation level just before the blood enters the lung. Additional increase in oxygen saturation may result via native lung gas exchange and is influenced by the lung condition and underlying lung disease.
- ART increased Pulmonary artery oxygen saturation by 26%. Increase was statistically significant
- ART exhibited a significant decrease of $PaCO_2$. Decrease was statistically significant
- Blood pressure was unaffected

Pre-clinical Studies (In-vivo)

When: August 2020[1]

Test: ART's ability to rebalance oxygen saturation levels within minutes

Where: LAHAV CRO in Israel[2]

Model: Swine model

ART system used for the studies: Lab unit constructed from lab components

25 hypoxemic events were induced

In 20 out of the 25 hypoxemic events induced, ART treatment[3] was provided with a blood flow rate of 1 liter per minute.

The results are presented here from these studies

Additional studies were conducted

- During 2019-2020, additional 15 pre-clinical studies were conducted as feasibility tests.
- On November 2021, an additional pre-clinical study was conducted in LAHAV CRO in Israel.

1. Research protocol was approved by the national ethics committee of animal experimentations.
2. LAHAV CRO https://lahavcro.com/
3. ART Treatment = extracorporeal blood oxygenation with one liter of blood

Method

In these initial pre-clinical studies the goal was to assess the oxygenation effectiveness of ART system[1] in swine model.

Swine model

The swine species chosen for the current study is Large-White X Landrace. **This breed was chosen due to a well-known resemblance of the anatomy, cardiovascular and respiratory physiology, size scale and other characteristics to adult humans.**

Study setup

Two anesthetized mechanically ventilated swine, were cannulated in the right internal jugular vein via a double lumen cannula. The cannula conduits were connected inlet & outlet tubes, allowing for blood transportation to and from the veno-venous ART device.

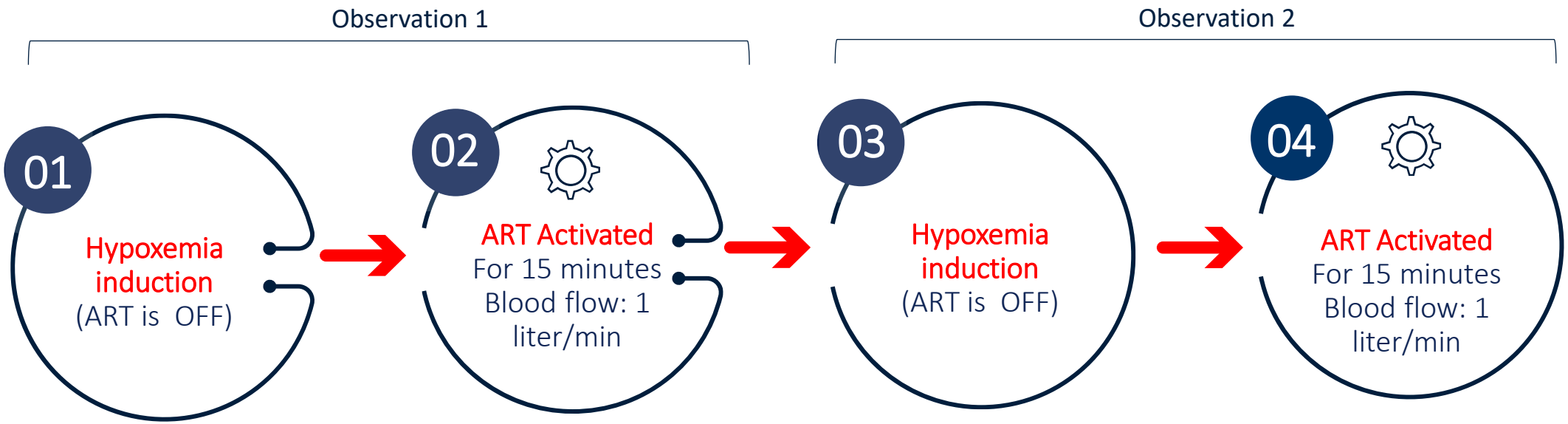
Hypoxemia induction

Intubated swine were ventilated with a hypoxemic gas-mixture resulting in oxygen saturation levels dropping to between ~80-85%. Hypoxemia was medically induced prior to each initiation of ART treatment

1. An extracorporeal respiratory support system composed of an oxygenator, a pump, a plug-and-play cartridge, sensors, and a control unit

Study design

Blood oxygenation and CO2 removal at a flow rate of 1 liter/min was assessed in 20 consecutive observations, with each test, the following steps were repeated:



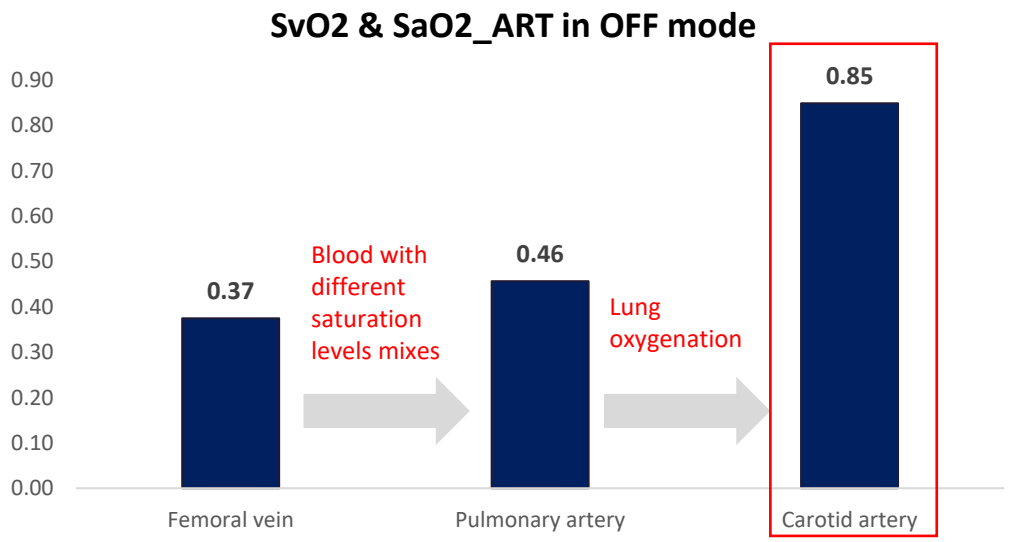
Blood samples are taken from the (1) femoral vein (2) pulmonary artery, and (3) carotid artery at baseline (prior to the activation of ART) and 15 minutes following the system's activation.

Study Results

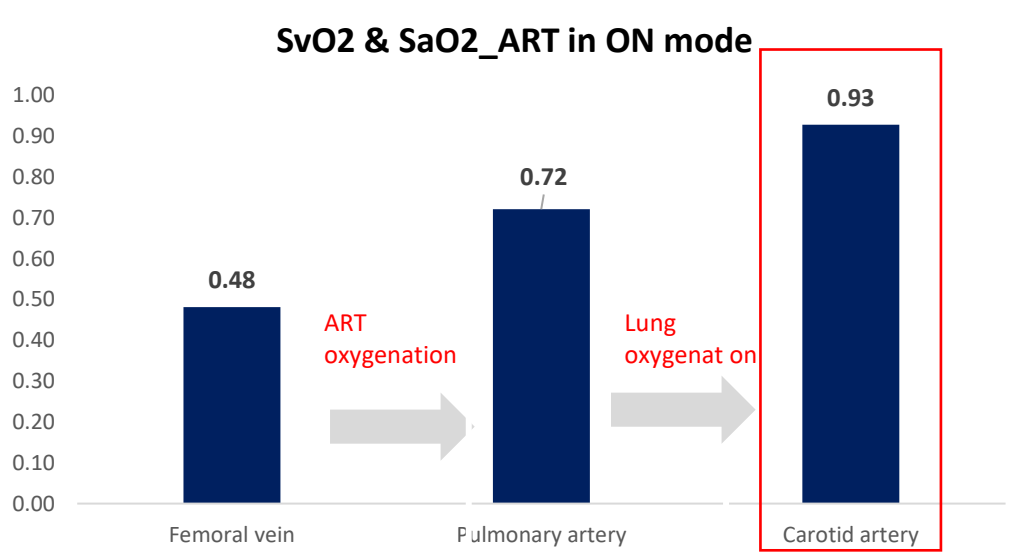
ART Provides Significant Increase In Saturation

The saturation levels in the pulmonary artery increased on average by 26%, and in the carotid artery by about 8-10%

Without ART



ART Activated

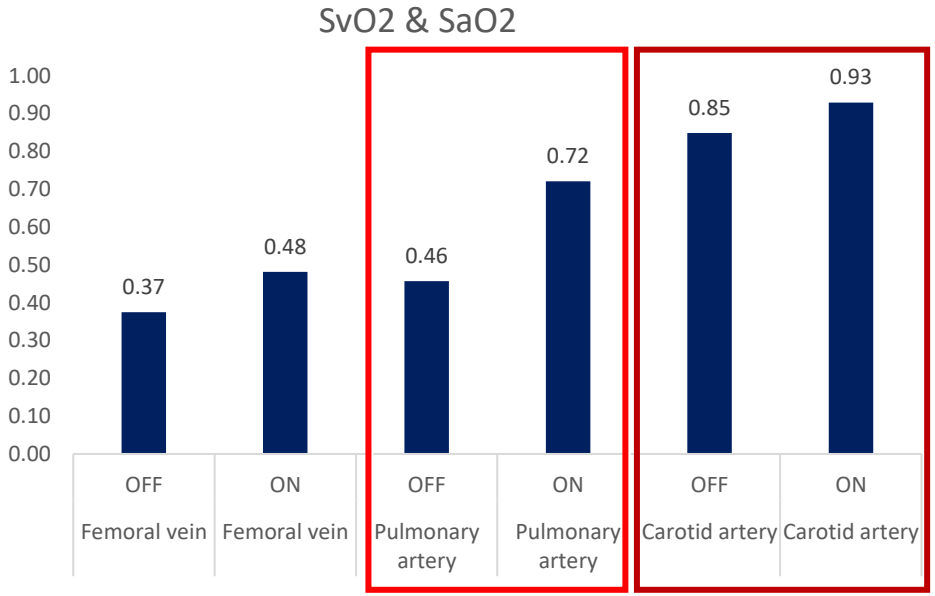


Parameter	Blood sample location	Prob>|t|
SvO2 (%)	Femoral vein	<0.005
SaO2 (%)	Pulmonary artery	<.0001
SaO2 (%)	Carotid artery	<.0001

ART's Contribution to Oxygen Saturation Should Be Reviewed Independently From the Lung Activity

ART increased saturation by 26% in the Pulmonary Artery

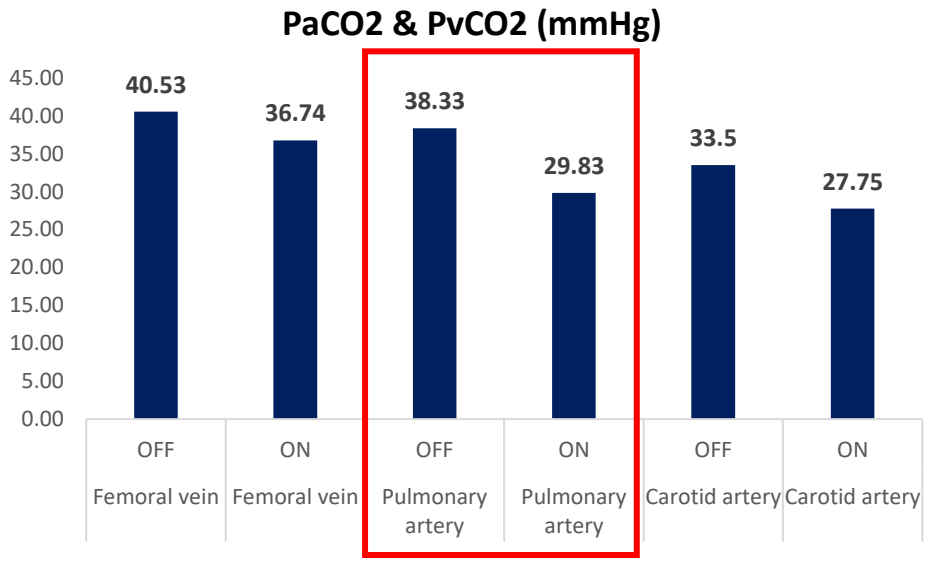
The contribution of ART to saturation should be assessed via saturation measured in the Pulmonary artery; right after ART oxygenates 1 liter of blood and just before the patients' entire Cardiac Output further oxygenates via the lungs.



Disclaimer: The oxygenation capabilities of a patient/animal model lung will depend on the underlying pathophysiology, the level of severity and response to treatment.

CO2 Removal Via ART Is Significant

ART contribution to PCO2 decrease is 8.5 mmHg in the pulmonary artery



Parameter	Blood sample location	Prob>|t|
PCO2 (mmHg)	Femoral vein	0.1609
PCO2 (mmHg)	Pulmonary artery	<.0001
PCO2 (mmHg)	Carotid artery	<.0001

Go To Market

Market Opportunity By Product*

ECLS System

Targeting $700m market

Intended use:
Life Support (Salvation Treatment - Last Resort)

Treatment setting: Intensive Care Unit

FDA Submission H1-2023
FDA Class II 510(k)

ART™ System

Targeting 20 million patient market

Intended use:
Respiratory support at an early-stage intended to prevent the need for Invasive Mechanical Ventilation

Treatment setting: Intensive Care Unit & General Medical Units

FDA Submission H2-2023
FDA Regulatory filing for De-novo or PMA

To-date the ART has not been tested on humans and is subject to the regulator's requirement. *Will require a new 510(k) marketing clearance or, depending on the modification, a de novo or other

Go-to-Market Strategy

Establishing multiple recurring revenue streams across medical sectors & markets

01 **Pursuing regulatory approvals in key markets:**
United States – Primary market
Europe – Secondary Market

02 **Pre-launch orders pipeline**
Exclusive deployment agreements for the potential deployment in Israel, Spain, Portugal, Poland, Czech Republic and Slovakia and 6 states in the U.S.

03 **Market penetration and gaining market share in collaboration with hospitals**
Market penetration through hospitals with prior experience with extracorporeal respiratory systems to facilitate faster adoption

04 **Collaboration with leading hospitals and professional associations**
Strategic partners for regional deployments.
Target health associations, such as: “The American Thoracic Society”, “The Extracorporeal Life Support Organization”

05 **Pursuing collaboration with strategic partners**
Global medical device companies, multinational electronics contract manufacturers and global medical device companies, may acquire ART primary components for blood enrichment applications

Market Penetration and Gaining Market Share

We have developed a flexible business model to drive global deployment

PRICING MODEL

ART system distributed as an OPEX when bundled with disposable respiratory support kits

Novel technology ART system

\+

Disposable respiratory support kits

- **Multiple consumer types** → Healthcare Centers, Medical Services & Medical Device Companies
- **Selling Disposable** → Cost-effective price per patient to support OPEX model
- **Aftermarket Services** → Contracting regional providers for distribution & aftermarket services of system & supplies

* Subject to change

Reimbursement Strategy

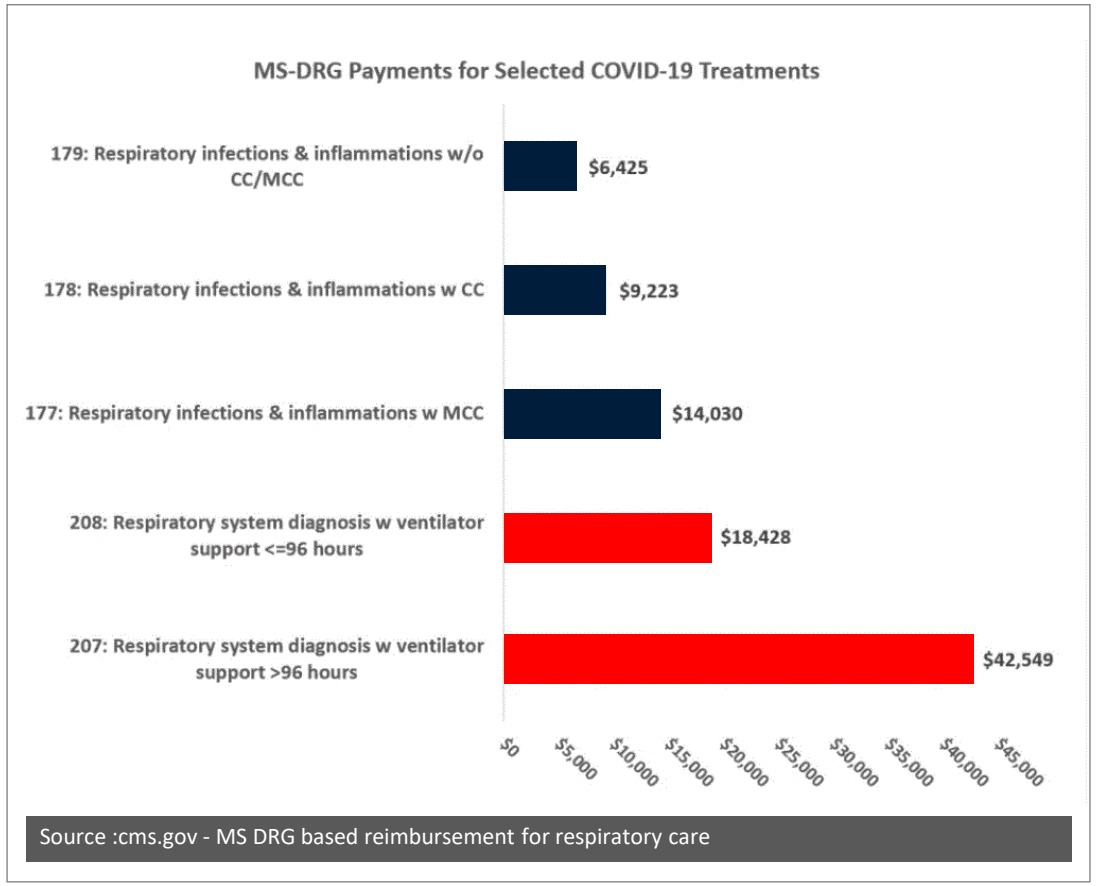
Inspira plans to utilize existing CPT Codes using a “New Approach” to an existing procedure

Expected to eliminate complications associated with MV

Aimed to reduce length of stay & re-admissions

Designed to reduced costs & operational expenses

Designed to reduce hospital & staff burden



Targeting Major Milestones 2022-2023

We are actively working to establish collaborations with strategic partners which may include:
Medical Device or Other Companies, Health Associations, Strategic Agreements for Manufacturing & Distribution

2022

Targeting to date $400M in Distribution Agreements

FDA Listed ART Component

The reveal of HYLA™, a new blood sensor

V&V Start for ECLS

H1-2023

FDA 510(K) Submission Of ECLS

Generation of Clinical Data

H2-2023

FDA IDE Submission for ART& Cannula

Deployment of ECLS

Timelines are subject to change. There is no guarantee as to the success of any trial. In addition, there is inherent risk and variability in the overall regulatory process. Approval by the FDA may not be granted, or the FDA may require different study parameters from those that are intended to be included in the submission. While the Company intends execute on strategic distribution agreements, there is no guarantee any sales will occur pursuant to those existing agreements, and agreements that may be executed in the future.

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
- Elscint Technologies
- Arazim Advanced Technologies

Avi Shabtay, BSc
COO

25yrs of startup development experience

Daniella Yeheskely-Hayon, PhD
CTO

13yrs development experience

Yafit Tehila, CPA
VP Finance & Legal

Experienced with Public Companies

Scientific Advisory Board - Several world-renowned KOL's

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.

Scientific Advisory Board - cont.

Dr. Dekel Stavi, MD
Intensivist Advisor

Has considerable experience in leadership and Extracorporeal Life Support programs, cardiology aspects of Intensive Care Unit (“ICU”) patients and treating hemato-oncology patients in ICUs. Prior to joining the interdepartmental program of critical care at the University of Toronto, he served as a senior intensive care physician at a leading Israeli hospital - the Tel Aviv Sourasky Medical Center (Ichilov), where he initiated its institutional extracorporeal membrane oxygenation (ECMO) program.

Dr. Avraham Abutbul, MD
ICU Respiratory Advisor

Senior physician at the Medical Intensive Care unit and at the Pulmonology Institute at the Hadassah Medical Center.
Lecturer at the Hebrew University Faculty of Medicine & Hadassah Medical School. Current research: Chronic Obstructive Pulmonary Diseases, &prevention of sepsis related organ dysfunction with Allocetra.

Dr. Yael Lichter, MD
Intensivist Advisor

A director of the Medical ICU at Sourasky Medical Center since 2020 and is also Treasurer of the Israeli ECMO Society since 2019. Dr. Lichter completed her residency programs in Internal Medicine (2015) and Intensive Care (2017) at the Sourasky Medical Center. Prior to this, Dr. Lichter was a Captain in the IDF, holding several positions as a field doctor in combat units.

Dr. Orit Cohen Jacob, MDV
Clinical & Research Advisor

Veterinary surgeon & expert in laboratory animal science, Israeli Prime Minister’s Office, Chairwoman of the National Animal Experimentation Ethics Committee, Founder of GLP/GMP companies:
SeruMed GMP Ltd.: Production of anti-venom serum.BioSphera Ltd.: Specialized in pre-clinical research

THANK YOU

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