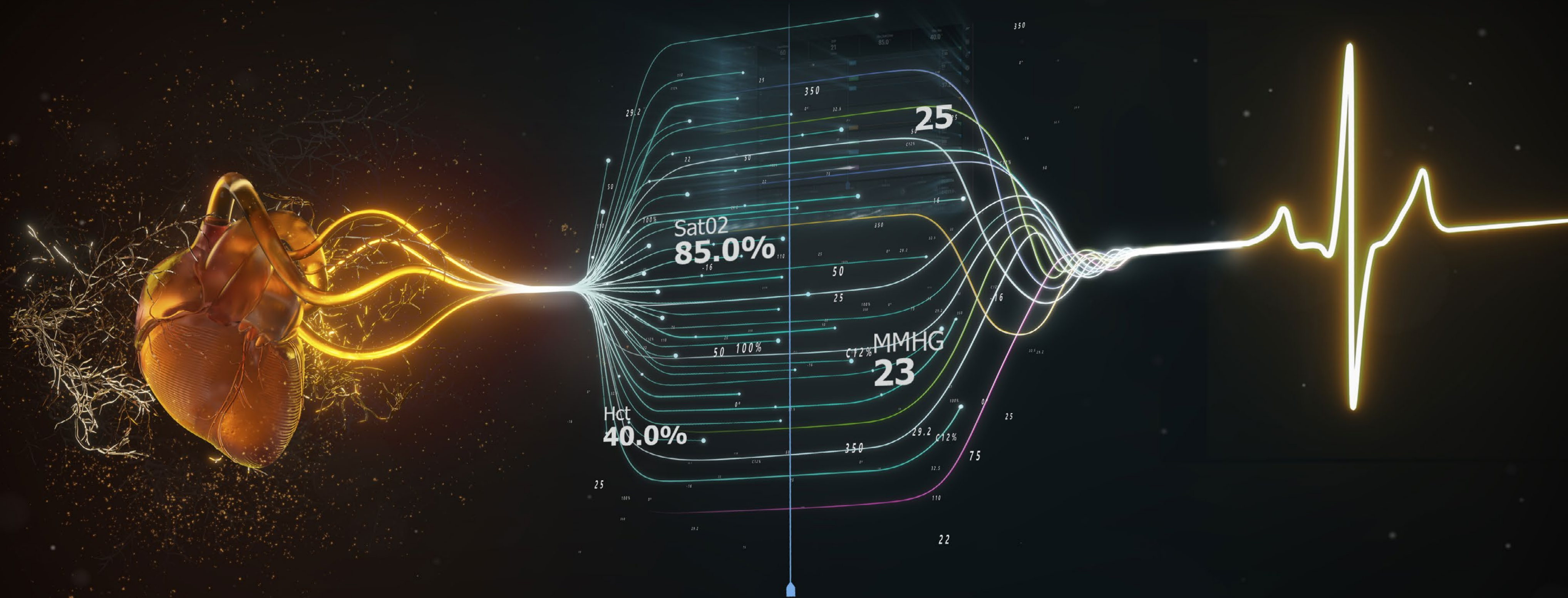


Essenz™

Perfusion System

Elevating
Perfusion
into a New Era





The New Era of Perfusion

With technology advancements and an increased focus on patient outcomes, perfusion and the role of the perfusionist are changing and entering a New Era.

An era where data takes a central role in enabling truly patient-tailored care.

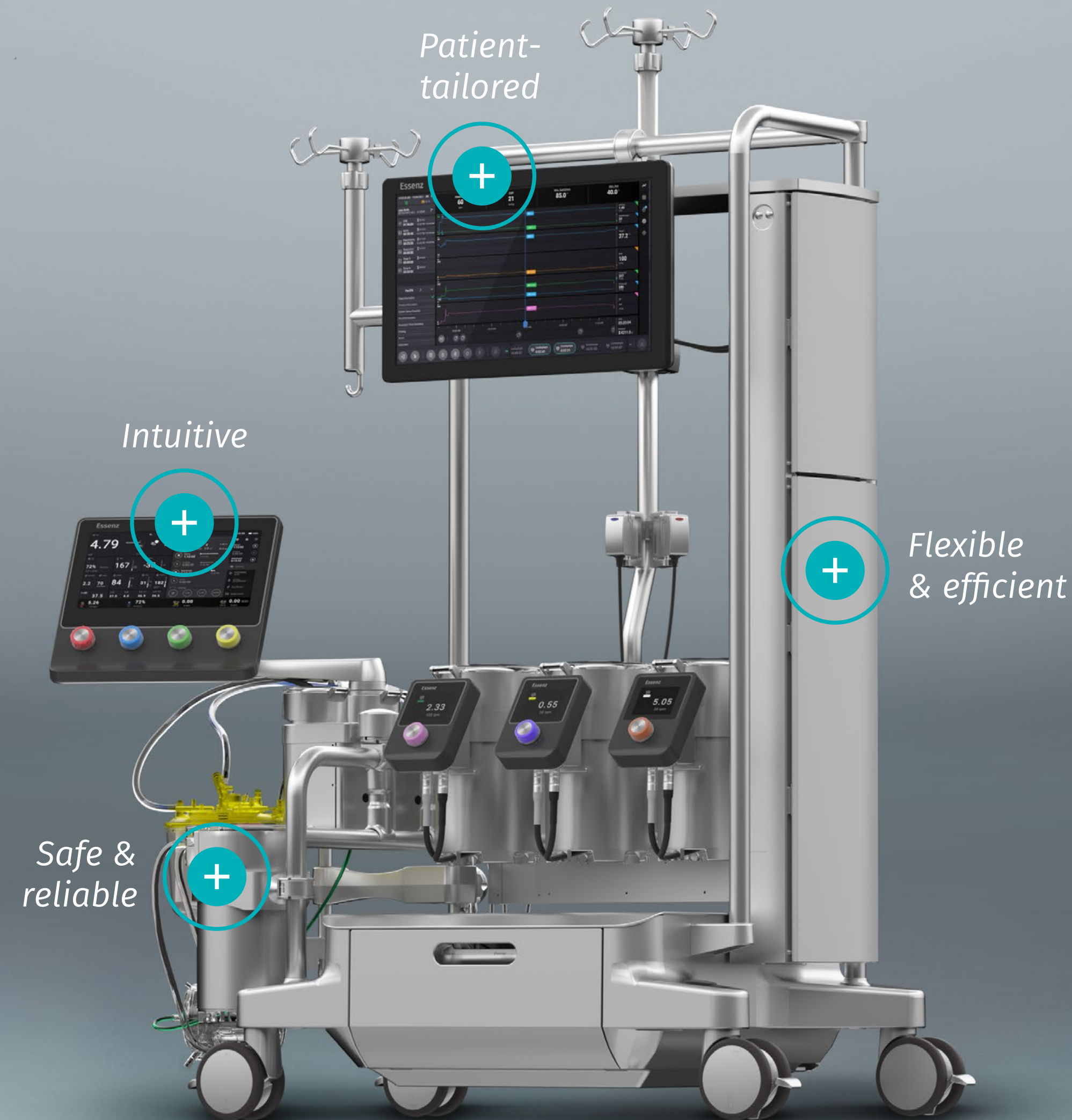
An era where, as a result, the spotlight can be placed on the true impact and value that perfusionists bring to clinical practice.



[Watch the video](#)

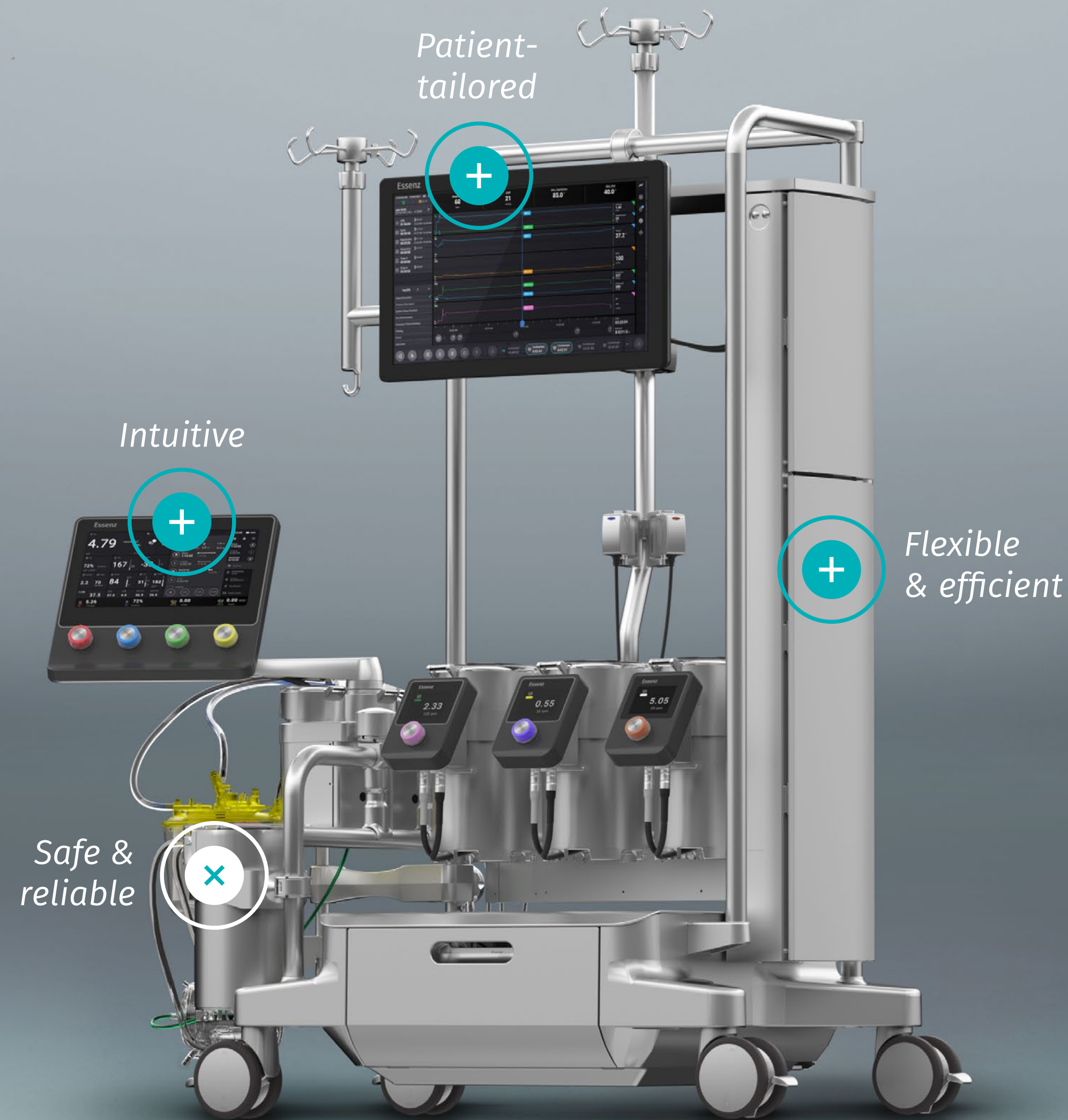
The Wisdom of Breath and Beat

Grounded upon four key pillars – safety, intuitiveness, efficiency and patient-tailored care—Essenz is a complete system designed, validated and tested with more than 300 perfusionists, to provide clinical wisdom and a value-added solution to thrive into the New Era of Perfusion.



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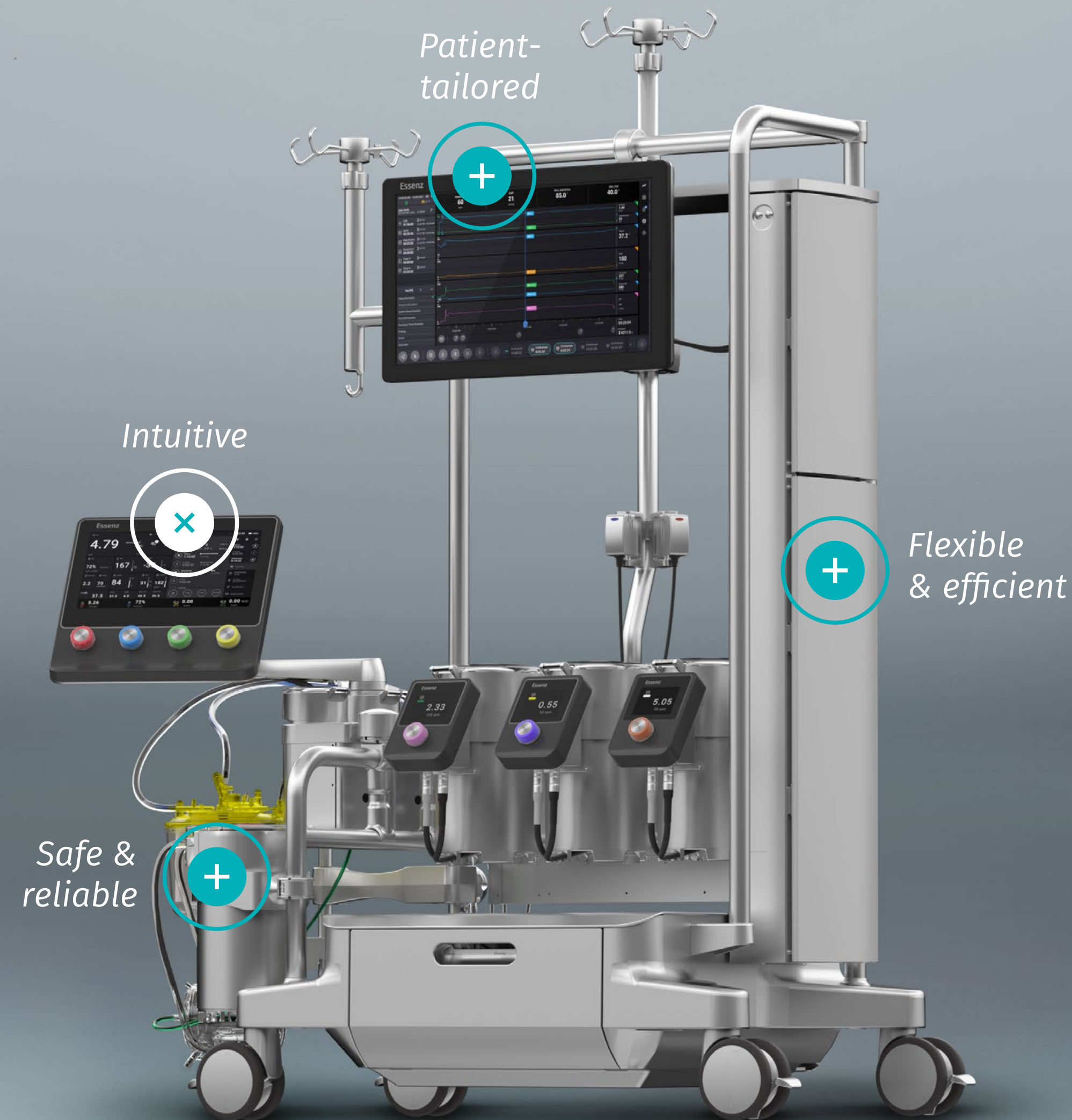


Safe & reliable

- Built on proven **S5 reliability** and a reputation for **safe CPB management**
- **State-of-the-art safety precautions** on both hardware and software, including embedded back-up solutions and automated sensor checks
- **Experienced** sales and service teams, providing clinical, commercial, and technical expertise to meet the individual needs of the hospitals

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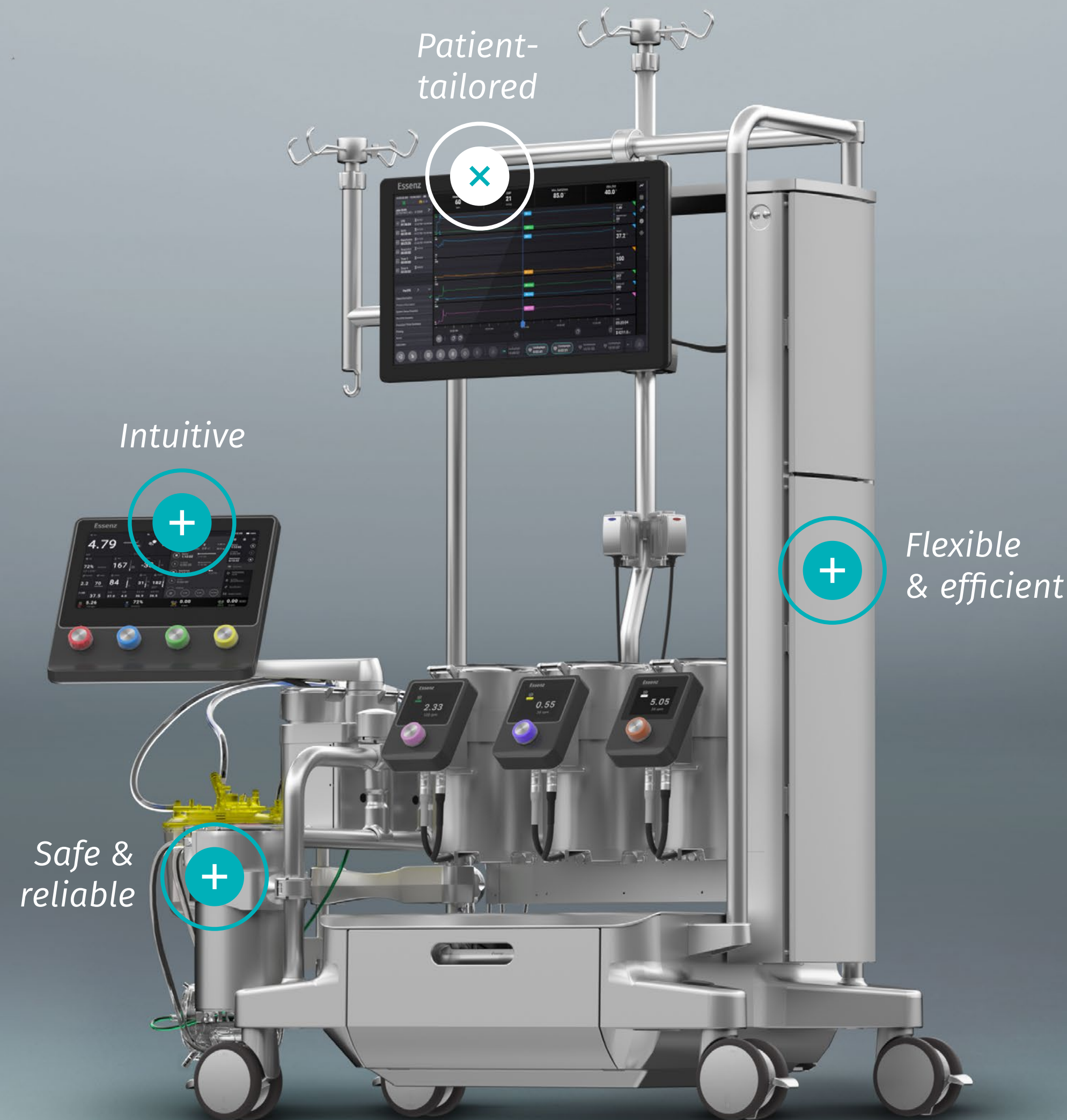


Intuitive

- **Short learning curve** thanks to the intuitive user interface
- **Continuously recorded data and events** that enhance traceability and support the perfusionist during and after the CPB procedure
- **World-class technology platform** to allow continuous advancements

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Patient-tailored¹

- Accurate sensing technology, including the **Essenz In-Line Blood Monitor (ILBM)** powered by B-Capta sensing technology, and official formulas to support the implementation of Goal-Directed Perfusion (GDP) therapy²
- **Essenz Patient Monitor with embedded clinical logic** to support data-driven clinical decision making³
- **Mast mounted pumps** to minimize priming volumes and thus reduce hemodilution³

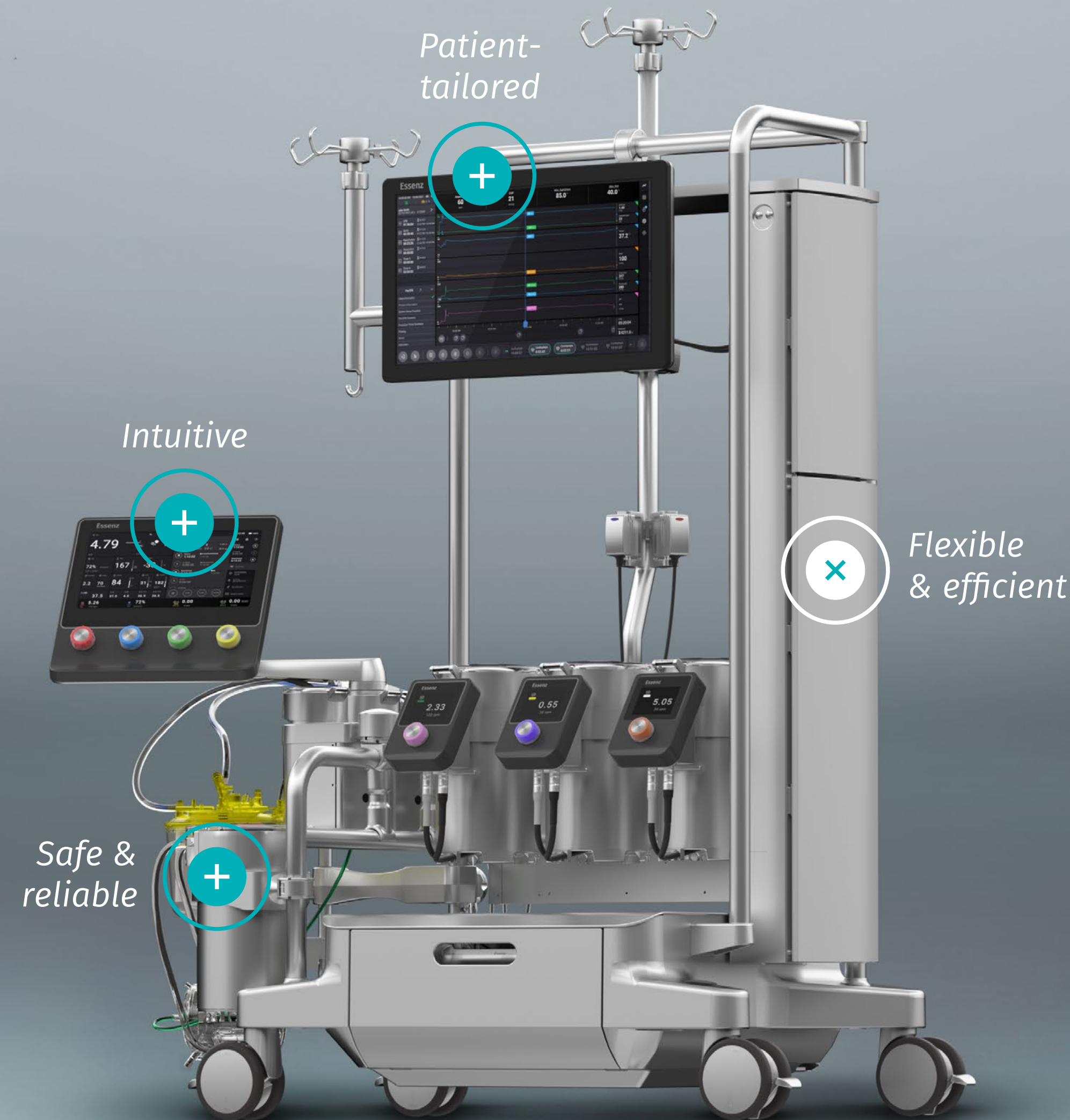
1. Preventive Strategies for Minimizing Hemodilution during Cardiopulmonary Bypass in the Cardiac Surgical Patient - August 2015 - Journal of Cardiothoracic and Vascular Anesthesia 29(6) DOI:10.1053/j.jvca.2015.08.002

2. Goal-Directed Perfusion to reduce Acute Kidney Injury: A Randomized Trial Ranucci M. et al. J Thorac Cardiovasc Surg. 2018 Nov;156(5):1918-1927.e2. doi.org/10.1016/j.jtcvs.2018.04.045

3. Inflammatory response to cardiopulmonary bypass: mechanisms involved and possible therapeutic strategies. - Wan S, LeClerc JL, Vincent JL. Chest. 1997 Sep;112(3):676-92. doi: 10.1378/chest.112.3.676.PMID: 9315800 - [5]

The Wisdom of Breath and Beat

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Flexible & efficient

- **Versatile system** that can be adapted to individual needs of patients, workflows and users
- **Ergonomic design** and advanced cable management for an efficient experience
- **Seamless integration** with OR external devices and hospital information systems

The key components

Built on LivaNova's 50 years of proven safety and reliability, Essenz Perfusion System supports the Perfusionist and the entire heart team in delivering truly patient-centric perfusion therapies and continuously improving clinical practice.

Embedded
Patient Monitor



LivaNova
disposables



Comprehensive
service proposition



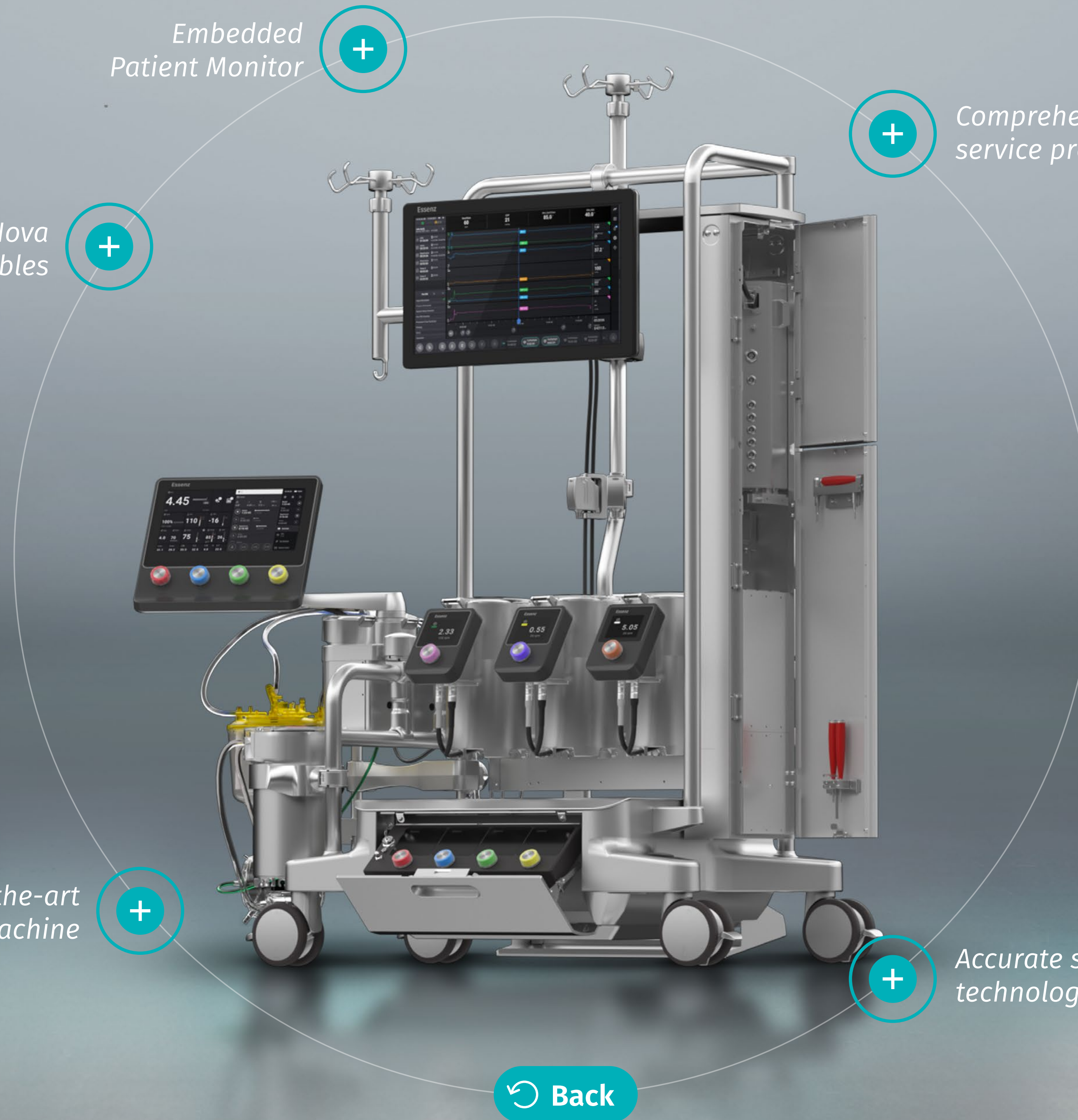
State-of-the-art
heart-lung machine



Accurate sensing
technology

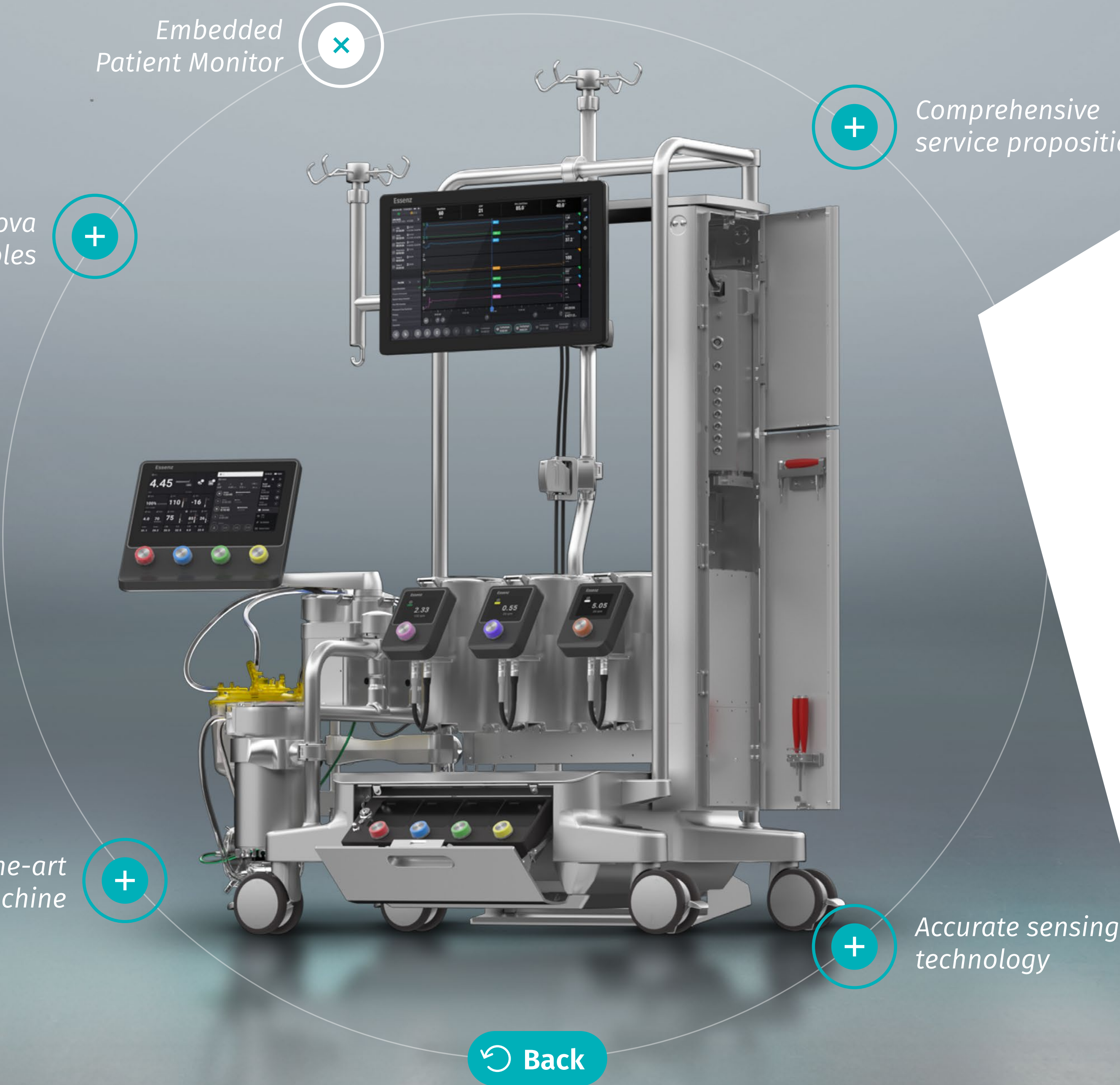


Back



The key components

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Embedded Patient Monitor

Essenz Patient Monitor includes all the essential perfusion functionalities needed to manage data during a CPB procedure, as well as advanced functionalities to support decision making.

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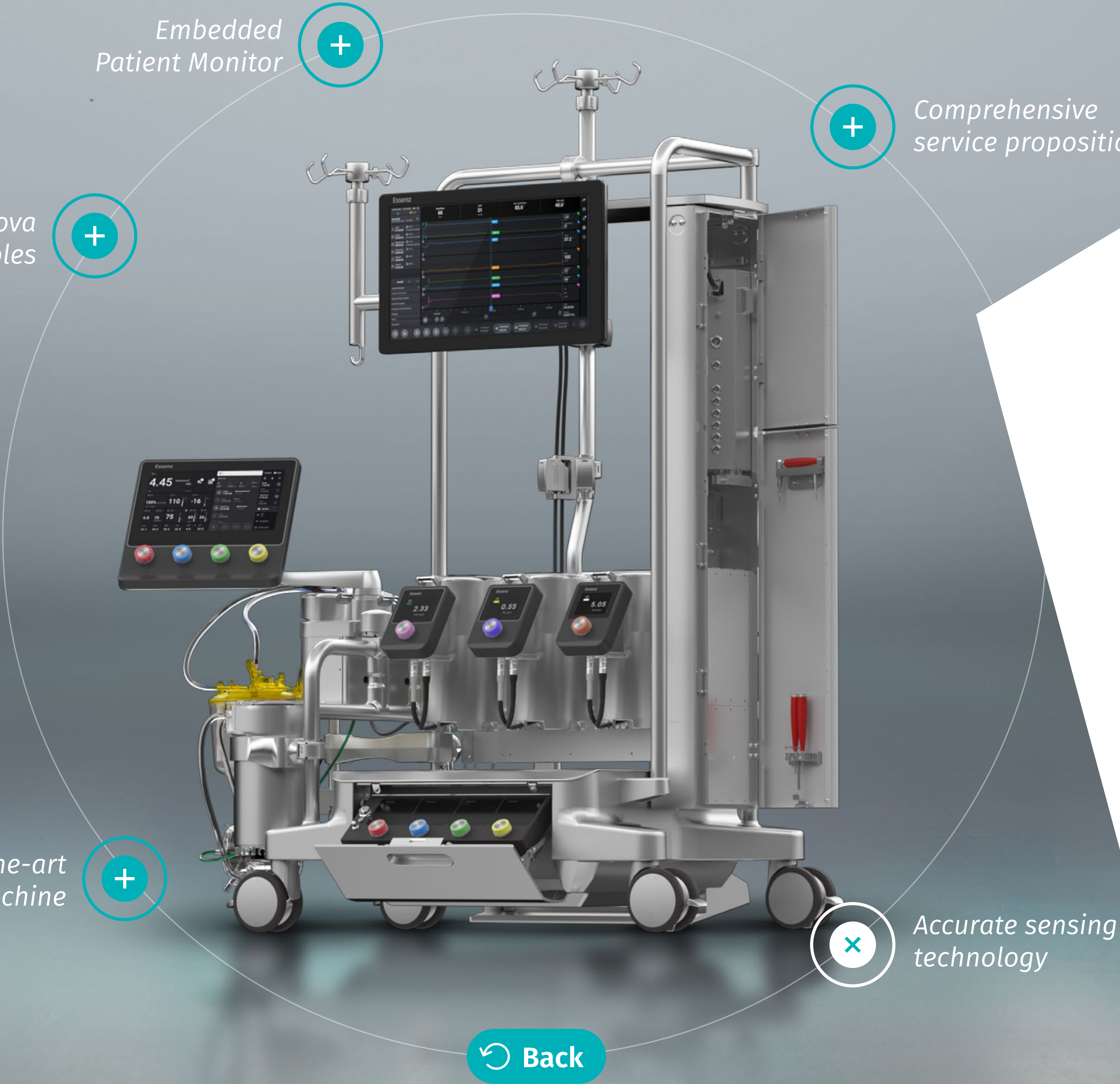


Comprehensive service proposition

The Essenz Focus service offering is designed to specifically deliver on the hardware & software servicing needs of the New Era of Perfusion.

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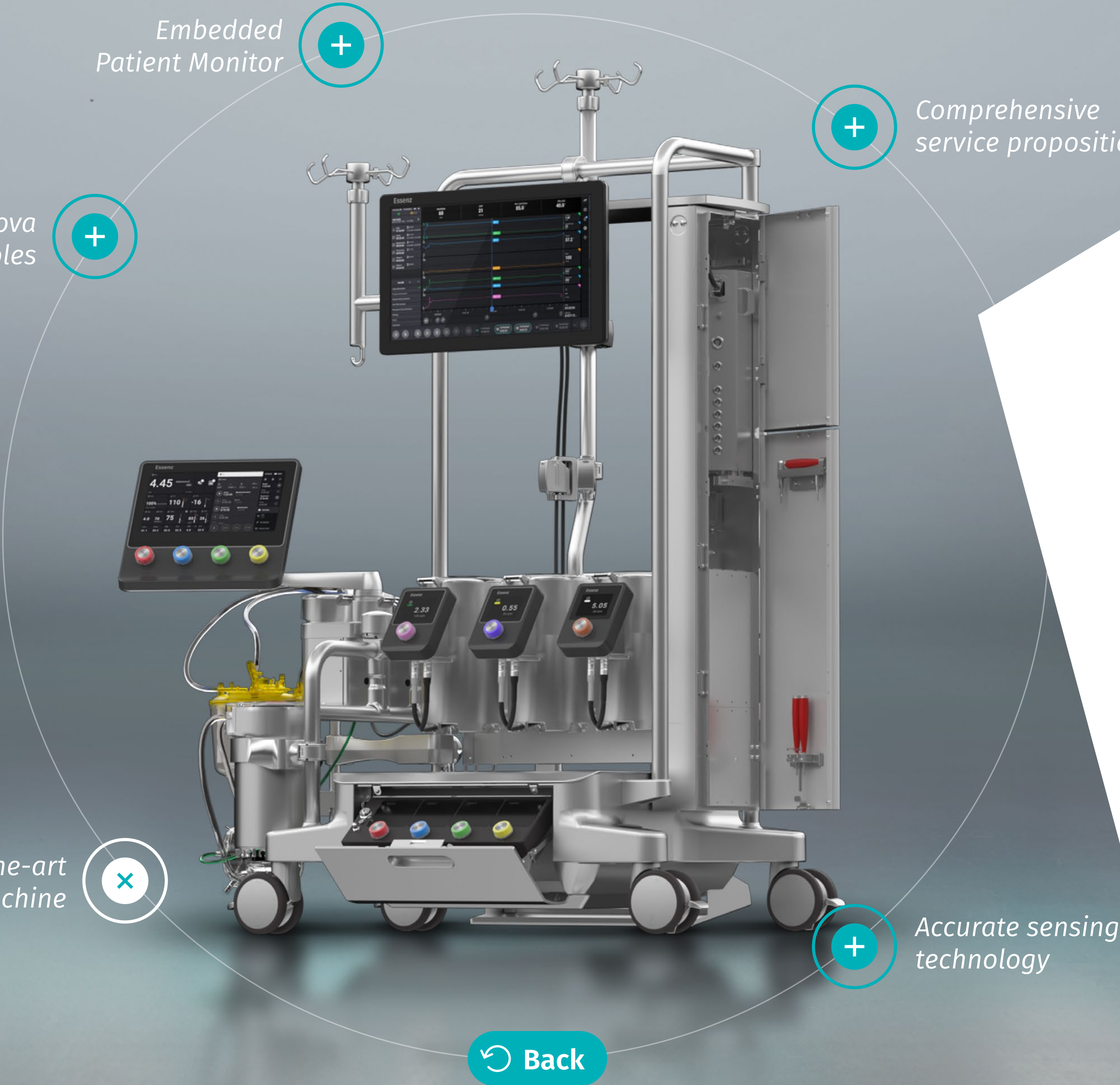


Accurate sensing technology

Essenz integrates accurate and reliable LivaNova sensing technology that provides measured data to support data driven decision making during the delivery of patient-tailored care.

The key components

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State-of-the-art heart-lung machine

The heart-lung machine makes it possible to create a system layout that places devices and controls close to the perfusionists as well as the patient. The innovative cockpit provides one central view to control the device and check all perfusion and patient parameters in the right place at the right time, minimizing distractions.

The key components

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Embedded Patient Monitor



LivaNova disposables



Comprehensive service proposition



State-of-the-art heart-lung machine



Accurate sensing technology



LivaNova disposables

- The mast-mounted design allows to optimize the positioning of tubing and oxygenators, reducing hemodilution.¹
- LivaNova disposable information is automatically transferred to the Patient Monitor, minimizing data entry and freeing up valuable time for the perfusionist.
- Pre-mounted in-line blood monitor cuvettes allows the perfusionist to save time during device set-up, especially in emergency cases.

1. Inflammatory response to cardiopulmonary bypass: mechanisms involved and possible therapeutic strategies. -Wan S, LeClerc JL, Vincent JL. Chest. 1997 Sep;112(3):676-92. doi: 10.1378/chest.112.3.676.PMID: 9315800 - [5]

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Patient Monitor



Comprehensive
service proposition



LivaNova
disposables



State-of-the-art
heart-lung machine



Accurate sensing
technology



↻ Front



A New Era inside and outside the OR

As market leaders in cardiopulmonary for the past 50 years, we take pride in our focus on building and providing reliable perfusion solutions, services and partnerships to support your hospital.

Our approach is tailored to fulfill the needs on different levels of your organization.

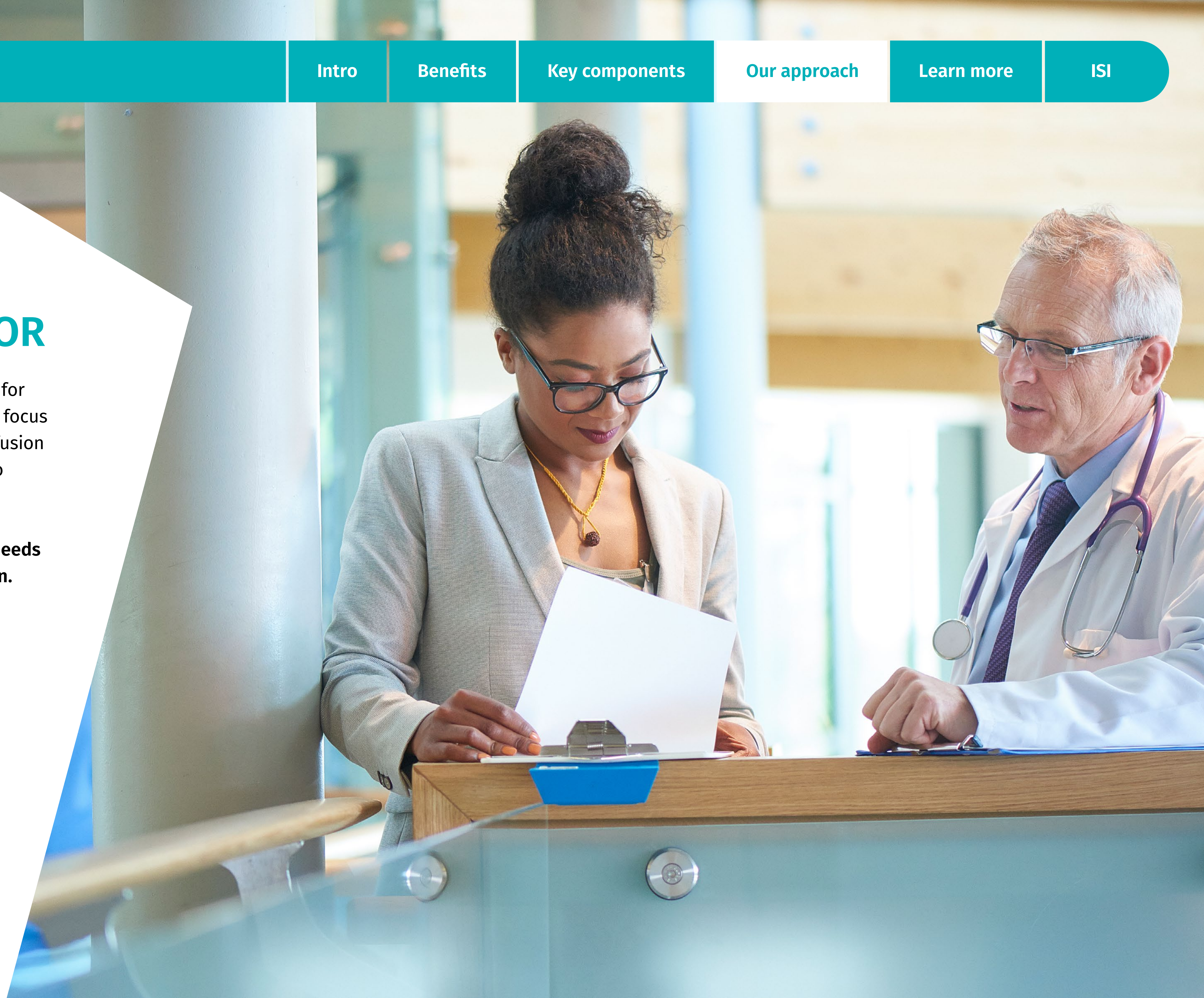
C-level



OR Director/
OR Team



Purchasing
Materials Manager





C-level



OR Director/
OR Team



Purchasing
Materials Manager



Optimized care

Essenz is designed with perfusionists to optimize care coordination and productivity for the entire interoperative team, providing a New Era of safety and reliability.



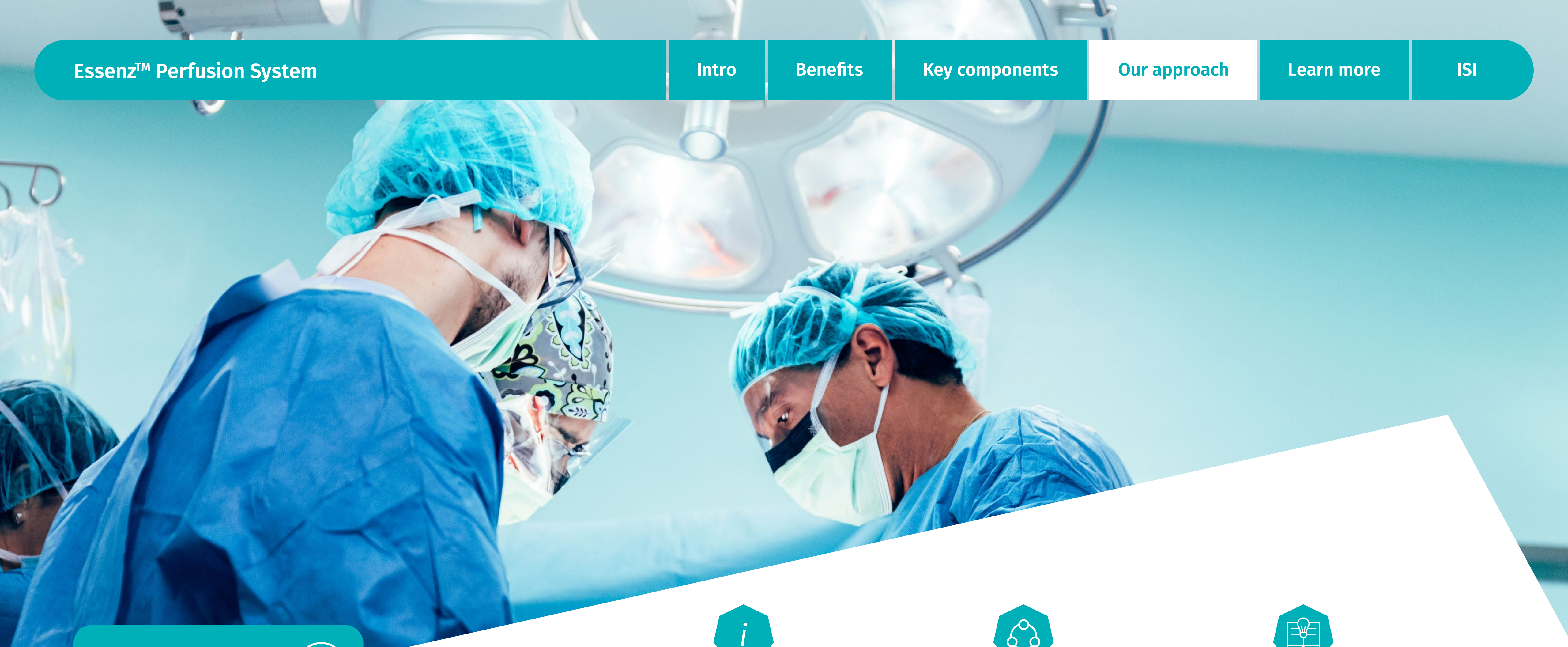
Informed decision making

By unlocking the potential of individualized care, Essenz intra-operative Quality Indicators will help drive informed decision-making for the entire OR team.



Continuity of care

By fully integrating with the hospital infrastructure, Essenz ensures continuity of care by enabling seamless processes and workflows, and flexibly adapts to your security and data protection standards.



C-level 

OR Director/
OR Team 

Purchasing
Materials Manager 



Informed decision making
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Continuity of care
By fully integrating with the hospital infrastructure, Essenz ensures continuity of care by enabling seamless processes and workflows, and flexibly adapts to your security and data protection standards.



Tailored learning opportunities
A blended training approach, including on-site, eLearning, and simulation sessions, allows the full perfusion team to be onboarded and make the most of the Essenz™ Perfusion System.



C-level



OR Director/
OR Team



Purchasing
Materials Manager



Long-term value

Through scheduled product releases, the Essenz System remains up to date and will continue to support the implementation of best practice in the evolving world of cardiac surgery, amortizing its total cost of investment.



Budget control and planning

The four Essenz Focus service packages give options to build suitable servicing contracts that meet your budget and servicing needs.



Flexible purchasing options

Essenz adapts to your hospital purchasing needs with options including outright purchase, usage agreement, buy-back, equity rentals and capital leasing.

Discover Essenz™ Perfusion System

Visit our website to learn more or contact your local representative and step into a New Era with us.

Contact us



Essenz™ Perfusion System

Important Safety Information

Heart-Lung Machine with Integrated Essenz In-Line Blood Monitor (ILBM)

The Essenz Heart-Lung Machine is intended to perform, control, monitor and support extracorporeal blood circulation replacing the mechanical pumping function of the heart, monitoring and regulating physiologic parameters during procedures requiring extracorporeal circulation.

US: Essenz HLM is intended to be used during cardiopulmonary bypass for procedures lasting six (6) hours or less.

Essenz ILBM is indicated for supplementary, in-line monitoring of the extracorporeal arterial oxygen partial pressure, venous oxygen saturation, venous hematocrit/hemoglobin, and arterial and venous temperature during cardiopulmonary bypass procedures up to six hours.

Essenz Patient Monitor

The Essenz Patient Monitor software is a modularly structured software program package that is exclusively used with LivaNova heart-lung machines. The system allows detailed recording of perfusion data during cardiopulmonary bypass procedures as well as the processing and evaluation of this data. The data may be recorded automatically or entered manually. The LivaNova Perfusion System Monitor is a panel PC intended to be exclusively used with LivaNova heart lung machines as a base and user interface for the Essenz Patient Monitor software.



This brochure is only approved for countries where the product is approved.

CONTRAINDICATIONS: No contraindications are known if the devices are used for the purpose described and in accordance with the stated operating conditions. Do not use the devices for any purpose other than indicated.

WARNINGS: The devices must be used in accordance with the instructions for use provided. For a complete listing of warnings please refer to the Instructions for Use. Medical intervention and therapeutic procedure must not be based solely on the Essenz Patient Monitor perfusion records (reports).

PRECAUTIONS: Federal law (U.S.A.) restricts these devices to sale by or on the order of a physician. For a complete listing of precautions/cautions please refer to the Instructions for Use. The devices should be used by qualified and skilled personnel, able to follow the indications and instructions for use contained in the information provided by the manufacturer.

Essenz In-Line Blood Monitor and B-Capta Blood Gas Monitor are clinically equivalent in terms of safety and performance as they have the same technology and intended use. Not approved in all geographies, consult your labeling. Please visit the LivaNova website to receive instructions for use containing full prescribing information including indications, contraindications, warnings, precautions and adverse events.

Legal Manufacturer:

LivaNova Deutschland
Lindberghstrasse 25
D-80939 Munich
Germany

Sorin Group Italia S.r.l.
Via Statale 12 Nord, 86
41037 Mirandola (MO)
Italy

Distributed in the USA by:

LivaNova USA
14401 W 65th Way
Arvada, CO 80004
USA



www.livanova.com