



LADENBURG THALMANN HEALTHCARE CONFERENCE

July 13-14, 2021

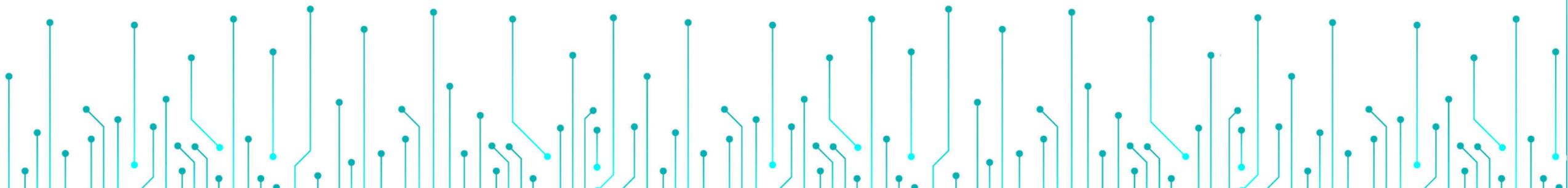
Anthony Fernando, President & CEO

Shameze Rampertab, EVP & CFO

Forward Looking Statements

This presentation includes statements relating to our vision for the future of performance-guided surgery and the role the Senhance® Surgical System may play. These statements and other statements regarding our future plans and goals constitute "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, and are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Such statements are subject to risks and uncertainties that are often difficult to predict, are beyond our control and which may cause results to differ materially from expectations, and include whether we will be well-positioned to continue to deliver on our strategy and bring transformative technology to surgeons, hospitals and patients globally. For a discussion of the risks and uncertainties associated with our business, please review our filings with the Securities and Exchange Commission (SEC).

You are cautioned not to place undue reliance on these forward-looking statements, which are based on our expectations as of the date of this presentation and speak only as of the date this presentation was first made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.





We believe in digitizing the interface between the surgeon and patient to pioneer a new era of **Performance-Guided Surgery** by unlocking the Clinical Intelligence to enable consistently superior outcomes and a new standard of surgery.

Asensus Surgical (NYSE American:ASXC)

Early-Commercial Stage Company Ushering In A New Era Of Minimally Invasive Surgery



Global
Regulatory
Approvals



Global
Training Centers



100+
Active Surgeon
Users



Active
Clinical Sites in
US, EU & Asia



4,500+
Surgeries
Performed



Compelling
Per Procedure
Economics



1st
eye-sensing camera control
haptic feedback
3 mm robotic instruments
augmented intelligence and machine vision
real-time surgical image analytics
pediatrics with robotic 3 mm

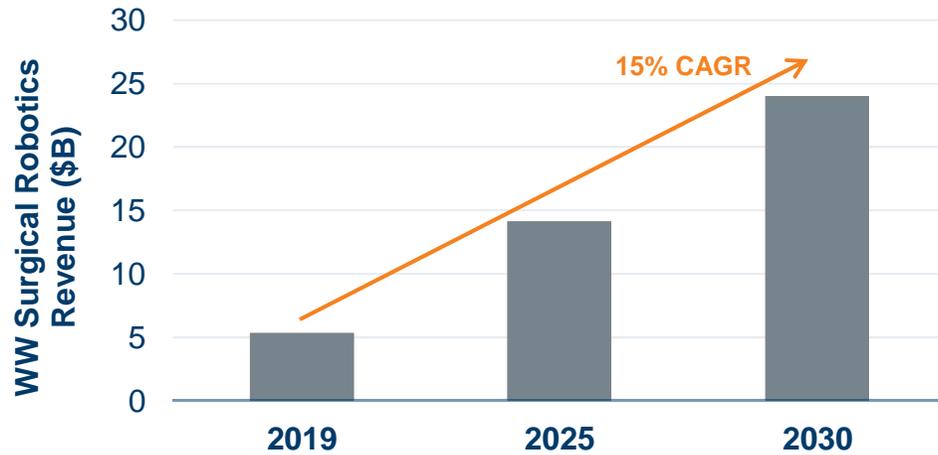


Strong
Talented Global
Team

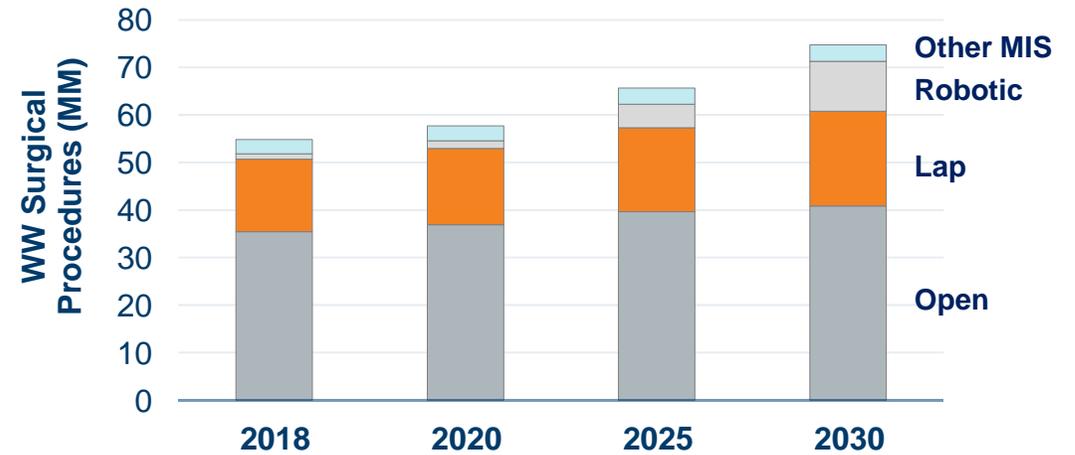


Integrated
Remote
Mentoring

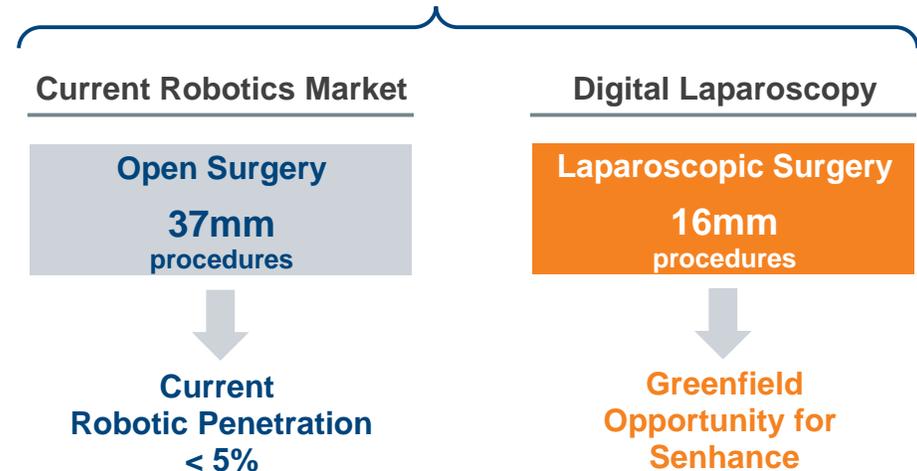
Global Market Trends in Surgical Robotics



Worldwide Robotic Penetration Rate is < 5%, Today



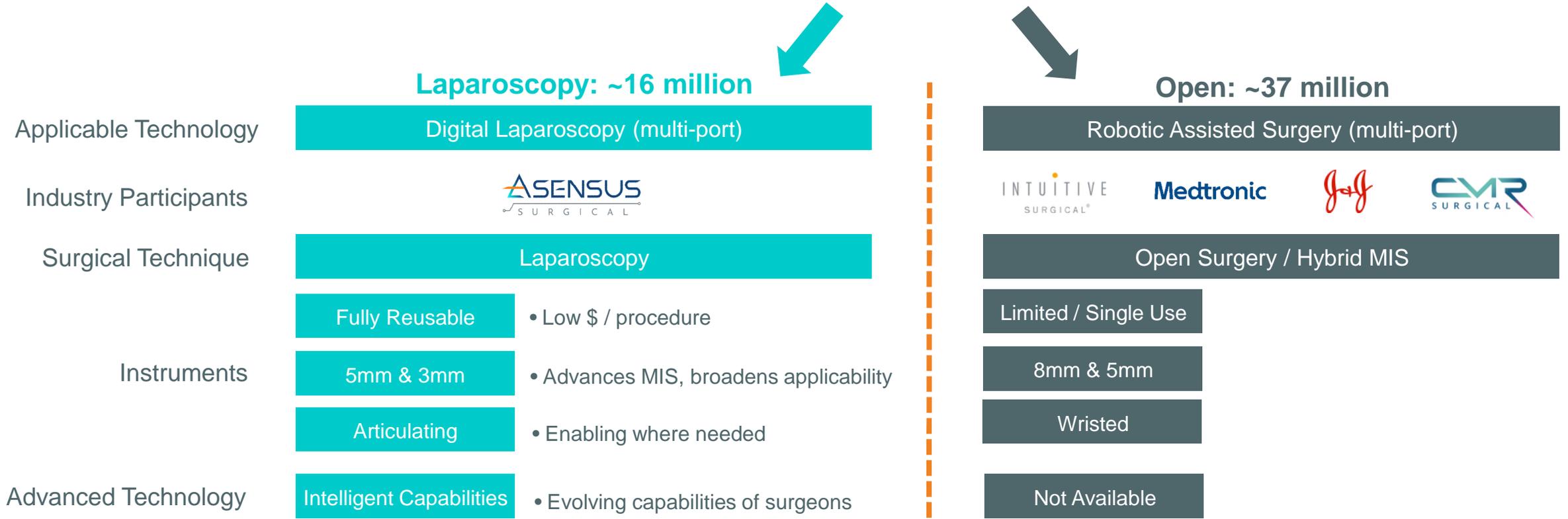
SURGICAL ROBOTICS IS A LARGE AND FAST-GROWING MARKET AND CONVERTING LAPAROSCOPIC SURGERY IS A GREENFIELD OPPORTUNITY



We Are Uniquely Focused on Laparoscopy

An Opportunity And Need To Add To The Ways Surgical Robotics Creates Value

Global Soft Tissue Abdominal Surgery Market



Senhance is the only platform able to address the conversion of laparoscopy by leveraging standard laparoscopic tools, digital information and decision support tools

Competitors are following the Da Vinci model and focusing on open surgery conversion

Senhance System Addresses Key Challenges Facing Hospitals and Laparoscopic Surgeons

Building The Bridge From Laparoscopy To Robotics



A **digital fulcrum** sets a dynamic virtual pivot point that helps potentially minimize the incision trauma

Standard reusable instruments keep costs similar to traditional laparoscopic instruments

Digital laparoscopy maintains familiar motion, ancillary tools, and techniques

The **3DHD visualization** provides the surgeon with additional intelligence regarding depth and spatial relation of organs

Eye-tracking camera control where the system can sense the surgeon's eye activity, allowing camera control

Open-platform architecture allows use and integration of existing OR technologies to maximize benefit from capital investments and support surgeon preference

Haptic sensing of the platform heightens the surgeon sensing of pressure/ tension through alerts if pressure threshold is reached for an added layer of security not currently available elsewhere

Allows the surgeon to be seated in an **ergonomically comfortable position** throughout the procedure

Intelligent Surgical Unit™
Brings AI and Machine Learning capabilities to surgery

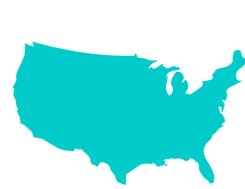


Senhance Connect
On-Demand, 2-way communication enabling remote mentoring



Robust Global Applicability

High Volume Procedural Approvals Widely Available To Address Significant Markets



United States
FDA Approved



European Union
CE Marked



Japan
PMDA Approved



Rest of World
Russia, Taiwan, Others

Senhance System Surgical



Procedural Indications for Use

General



*1Q-21
Clearance*



GYN



*Thoracic**



Pediatric



Urology



Addressable Market
(# of annual procedures)



16 million

Digitizing Laparoscopic Instrumentation

Broad Instrumentation Add Unique Advantages For Surgeons And Patients



Core Laparoscopic



-
-
-

*Developed broad instrument portfolio with **70+** instruments in the catalog*



Ultrasonic

-
-
-

*New standard in minimally invasive robotic surgery with **3mm** instruments*



3mm

-
-
-

*Reusable instruments enable **compelling per procedure economics***



Articulating

Filed for FDA Clearance 1Q21

-
-

Our Path To Market Leadership

Delivering A New Era In Digital Surgery

- 1 Educate surgeons on the benefits of Senhance
- 2 Grow global installed base
- 3 Increase global procedure volume
- 4 Expand the portfolio
- 5 Continue the technological advancement of Senhance

1 Educating Surgeons On The Benefits Of Senhance

Grow Compelling Set of Data to Demonstrate Clinical and Economic Value

60+
peer review
articles to date

Focused on the following data:

- Health economics
 - Cost per procedure
 - Procedure times/workflow
- Usability across specialties
- Clinical outcomes

The TransEnterix European Patient Registry for Robotic-Assisted Laparoscopic Procedures in Urology, Abdominal, Thoracic, and Gynecologic Surgery ("TRUST")

Dietmar Stephan¹, Ibrahim
Affiliations + expand
PMID: 33513657 DOI: 10.

Abstract
Introduction: Robotic sur
da Vinci® System (Intuitive
monopoly for years afterw
Morrisville, North Carolina
movements and is design
patients after different vis
with the Senhance™ digita
Materials and methods: S
surgery with the Senhance
and bilateral), cholecystect
in Europe between Februa

First experience using the Senhance surgical system in laparoscopic local gastrectomy for gastrointestinal stromal tumor

Hirofumi Sugita¹, Shinichi Sakuramoto¹, Junya Aoyama¹, Sunao Ito¹, Shuichiro Oya¹,
Kenji Watanabe¹, Naoto Fujiwara¹, Hiroka Kondo¹, Yutaka Miyawaki¹, Yasumitsu Hirano¹,
Hiroshi Sato¹, Shigeki Yamaguchi¹, Isamu Koyama¹

Affiliations + expand
PMID: 33590962 DOI: 10.1111

Abstract
Various innovative robotic syst
Surgical System (SSS) is a digit
Several reports have describ
and colectomy. However, use
case of laparoscopic local gast
74-year-old man diagnosed w
times were 117, 11, and 59 mi
This study is the first to report
SSS can use reusable forceps a
instruments is also progressin
Keywords: GIST; Senhance sur
© 2021 Japan Society for Endosco

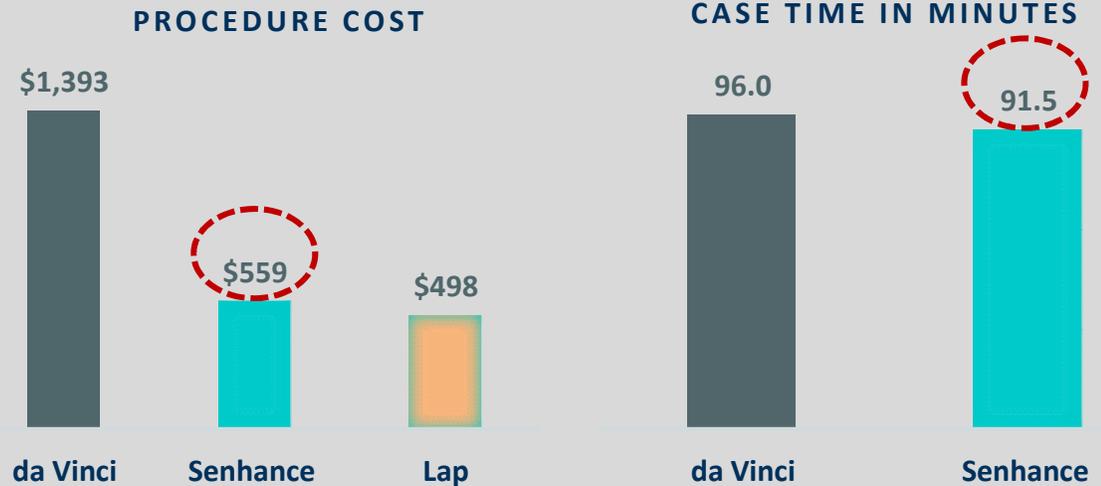
Senhance surgical system in benign hysterectomy: A real-world comparative assessment of case times and instrument costs versus da Vinci robotics and laparoscopic-assisted vaginal hysterectomy procedures

Herbert Coussons¹, Josh Feldstein¹, Steve McCarus²
Affiliations + expand
PMID: 33860631 DOI: 10.1002/rcs.2261

Abstract
Objectives: Comparison of retrospective, learning curve benign hysterectomy cost and case time data from Senhance total laparoscopic hysterectomy (TLH) cases with similar da Vinci robot cases and laparoscopic-assisted vaginal hysterectomy (LAVH) cases.
Methods: Instrument costs, console time, and case time analysis from six surgeons at four U.S. and European hospitals compared with retrospective, sequential da Vinci TLH and standard laparoscopic LAVH cases extracted from the CAValytics database.
Results: Senhance Gyn surgeons in their learning curve when compared to da Vinci learning curve Gyn surgeons achieved lower median instrument costs (\$559 vs. \$1393, respectively, p < 0.001) with comparable console times (91.5 vs. 96 min, p = 0.898); Senhance and LAVH case costs were comparable (\$559 vs. \$498, p = 0.336).

International Journal of Medical Robotics (Apr 2021)

Senhance surgical system in benign hysterectomy: A real-world comparative assessment of case times and instrument costs versus da Vinci robotics and laparoscopic-assisted vaginal hysterectomy procedures



- Senhance per procedure costs were less than half of da Vinci
- Senhance per procedure costs were in line with laparoscopy
- Case times between Senhance and da Vinci were comparable

2

Growing Global Installed Base

Expanding Number of Systems Being Used Across Multiple Geographies



28

Active Installed Units

6

Global Training Centers

13

Foundational Sites

- 10 systems added in 2020
- 10 – 12 systems expected to be added in 2021
- 2 lease agreements signed YTD 2021

- 2 Training Centers added LTM (EU, Japan)

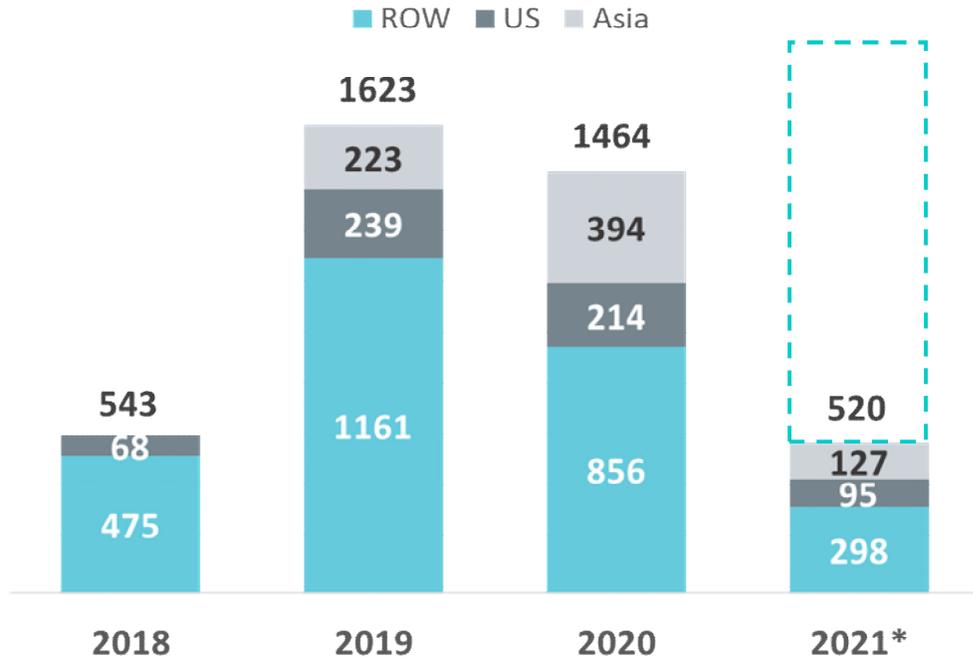
- Foundational Sites expected to expand in 2021

3

Increasing Global Procedure Volumes

Senhance Demonstrating Strong Clinical Performance Across The Three Major Geographies

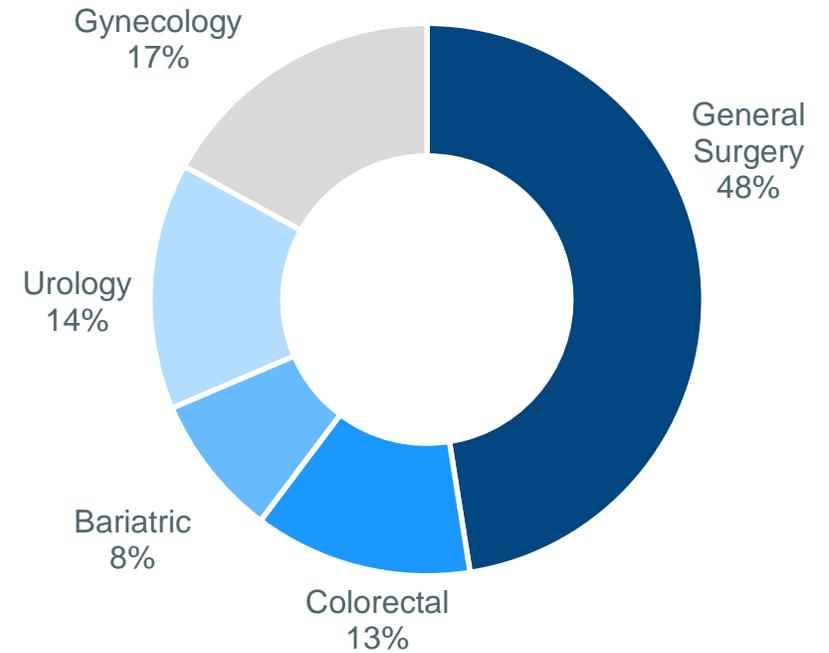
GLOBAL CLINICAL CASE VOLUME TREND



Year end Active Sites	2018	2019	2020	2021**
	6	18	28	38-40**

Strong clinical case performance

2020/2021* CASE MIX



Adoption across multiple specialty areas, demonstrating broader applicability and adoption

4

Expanding The Portfolio

Broadening Applicability Through Regulatory And Instrument Expansion

1Q'21

CE Marking:
Initial ISU™FDA 510(k) clearance:
**Expanded General
Surgery Indication**

- Provided Senhance digital laparoscopy programs access to new Augmented Intelligence technology
- Brings initial Performance-Guided Surgery capabilities to European hospitals
- Expanded on-label applicability
- Can be utilized in 2.7 million annual procedures
- Key to future growth

2Q'21

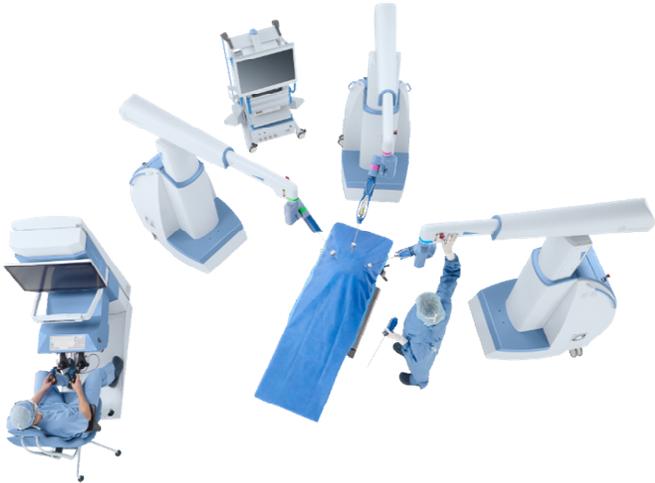
FDA 510(k) submission:
**Articulating
Instruments**Upcoming FDA 510(k)
submission: **Next
Wave ISU Features**

- Widens the clinical utility to a broader number of surgeons
- Following approval, will initiate limited launch before full commercialization
- Next phase in progress towards Performance-Guided Surgery
- Will provide advanced Machine Vision and Augmented Intelligence capabilities
- Only robotic platform to offer scene recognition and surgical image analytics

5 Continue The Technological Advancement Of Senhance

Focused Investment To Deliver The Future Of Surgery

Senhance



Robust Digital Laparoscopy platform built on the fundamentals of MIS

Intelligent Surgical Unit™ (ISU™)



Digital Platform capable of machine vision and augmented intelligence to enable real-time surgical analytics

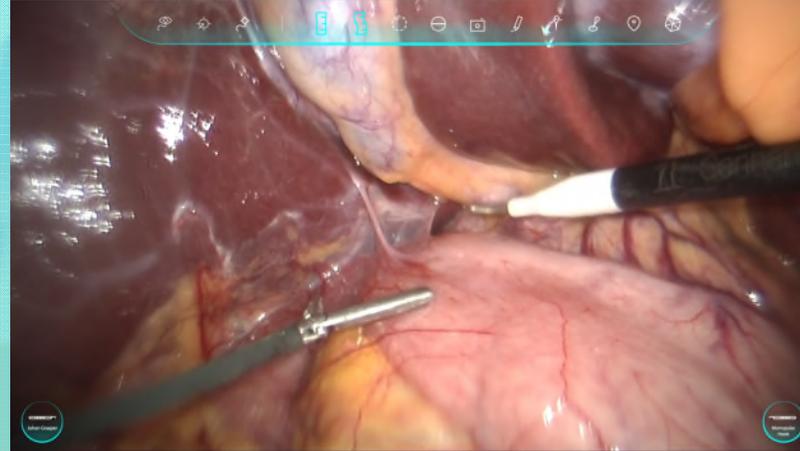
Performance-Guided Surgery



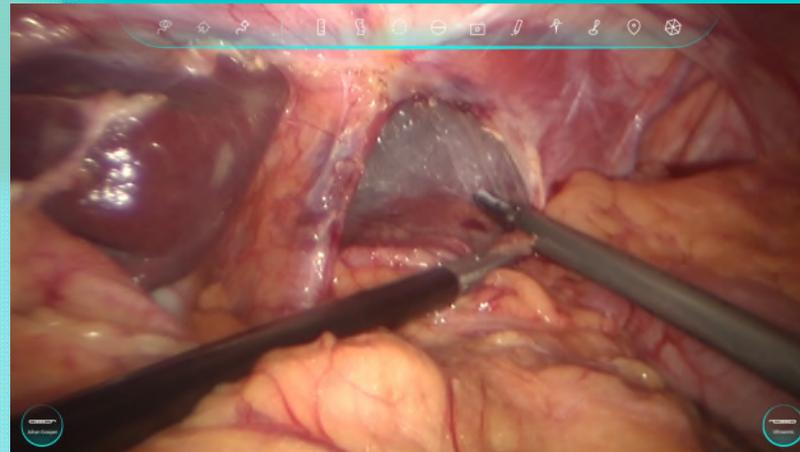
Clinical Intelligence to unlock superior outcomes with surgery

ISU: The First Machine Vision System In Robotic Surgery

Laying The Foundation For Digitizing Surgery → Enable Performance-Guided Surgery

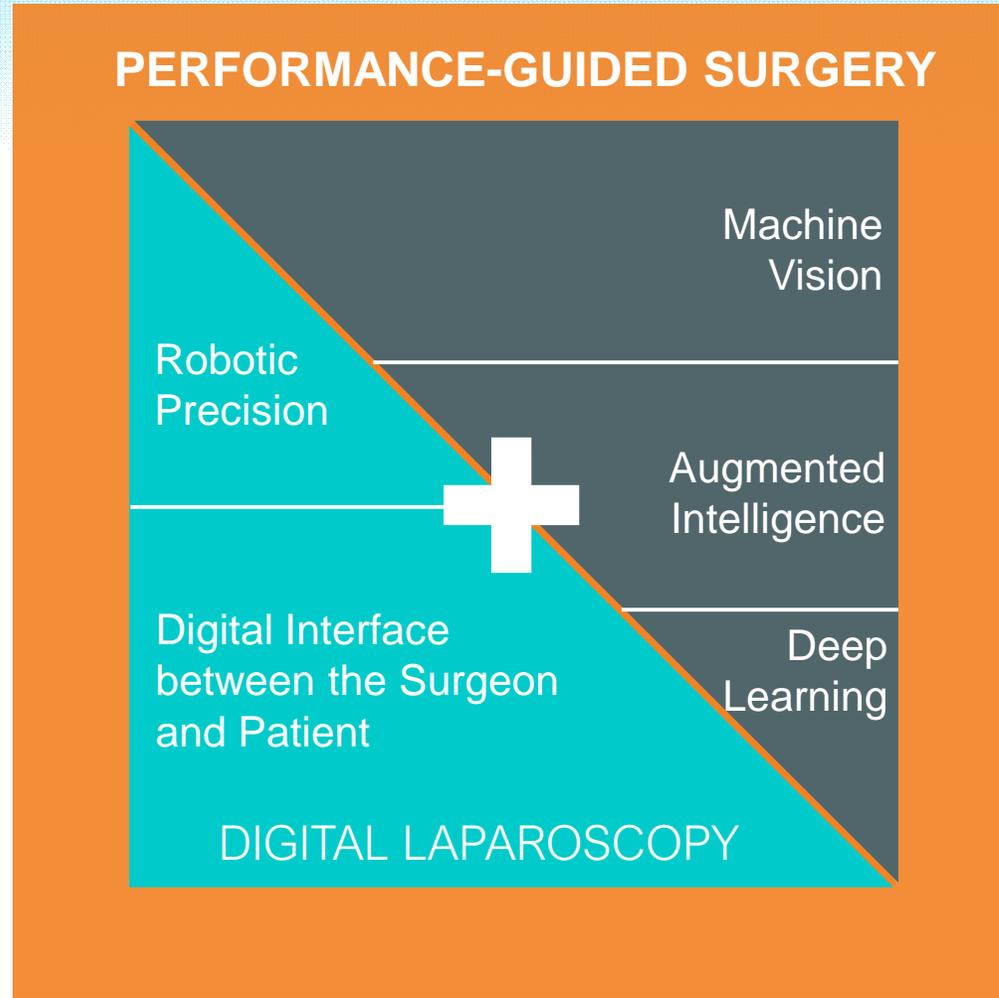


Vision Based
Real-Time 3D
Point to Point
Measurement



Real-Time Defect
Identification and
Sizing

Performance-Guided Surgery



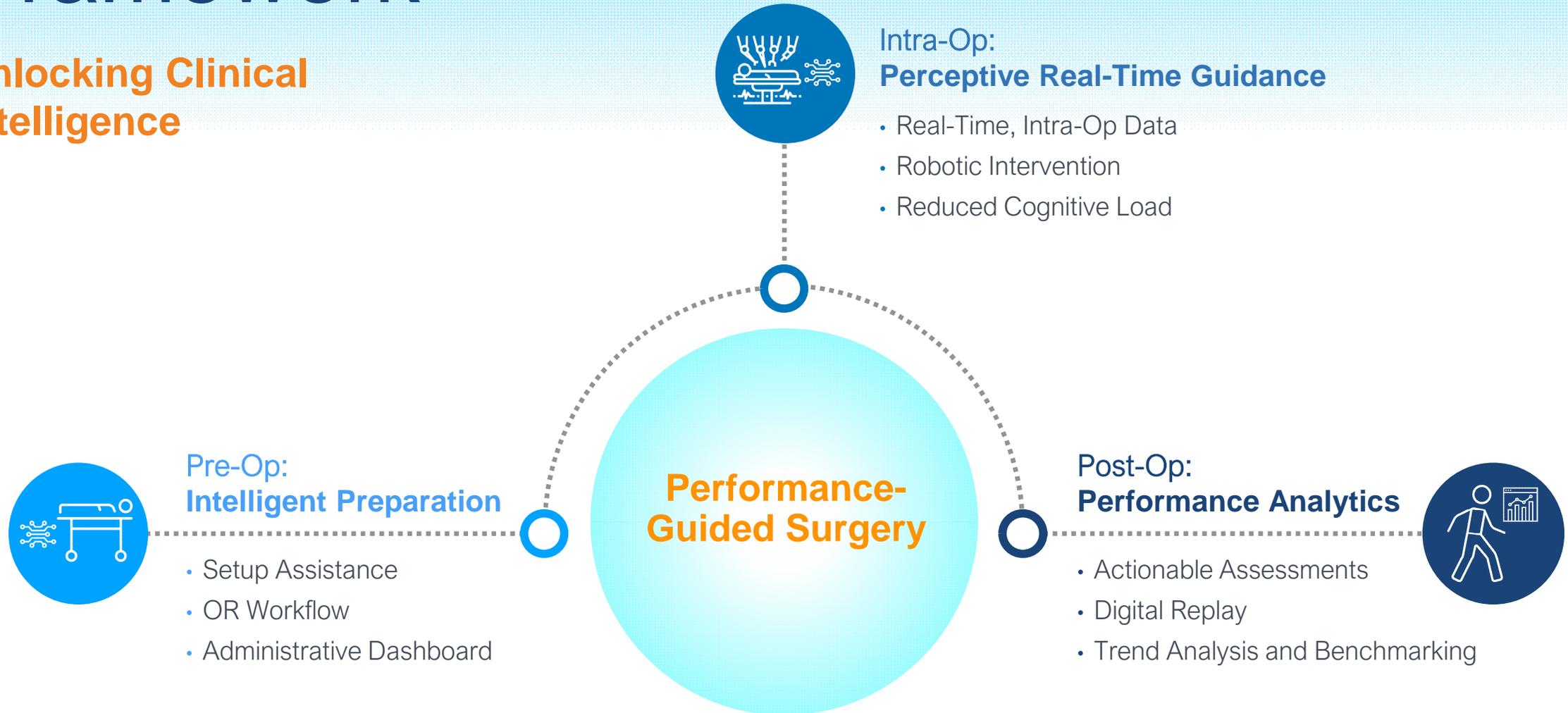
Improved Decision Making

Improved Collaboration

Improved Predictability

The Surgical Assurance Framework

Unlocking Clinical Intelligence

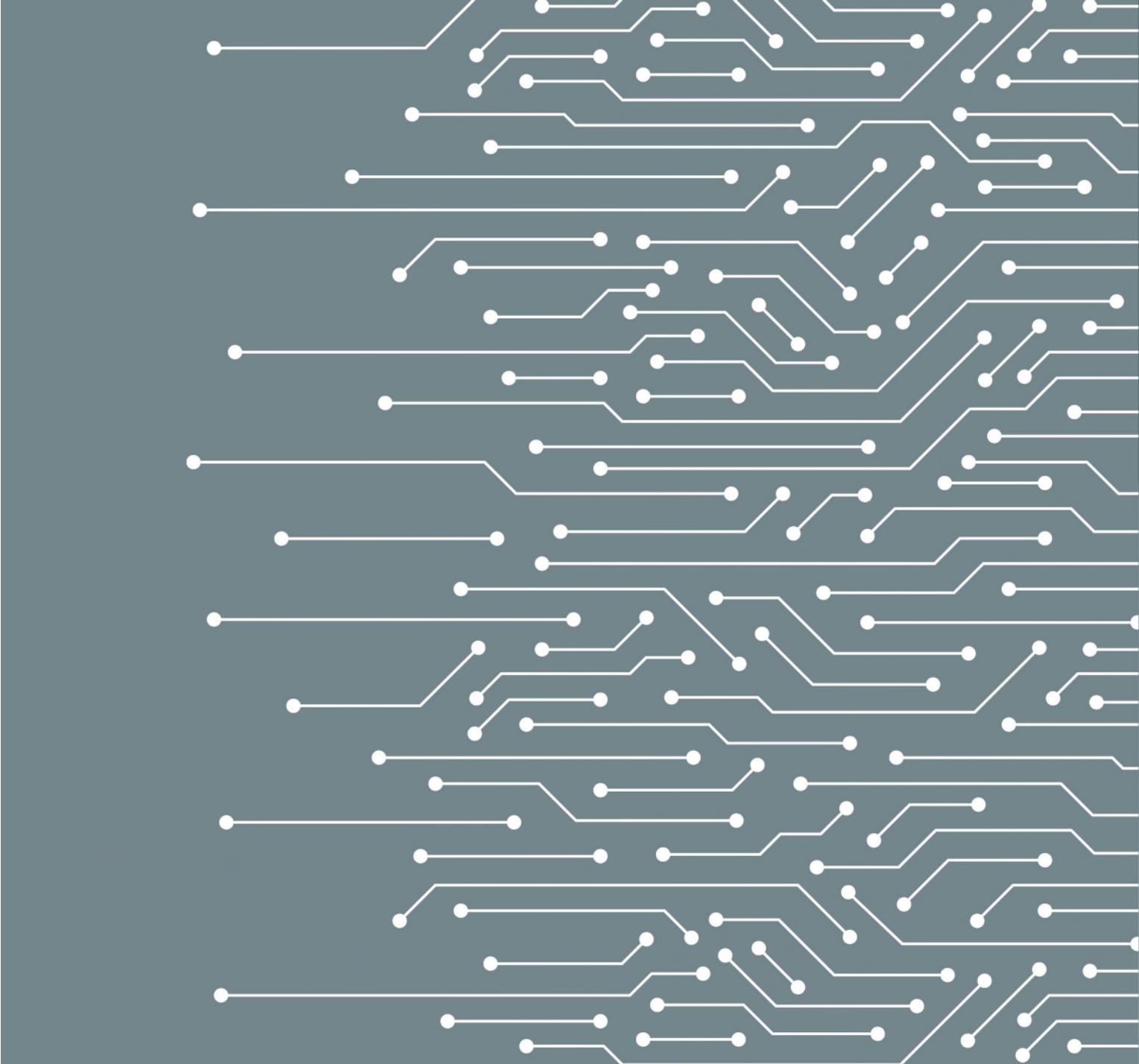


Senhance Connect

Mobile In-OR Surgeon Communication System



- Connects expert Senhance Surgeons across the Globe
- Streams multiple camera views and the endoscopic view simultaneously
- Allows 2-way screen sharing and annotation



Key Operational Accomplishments

2021 YTD Financial and Operational Highlights

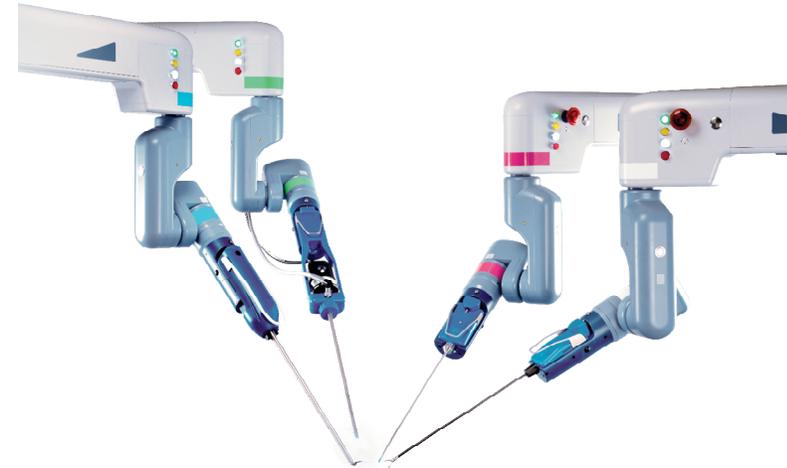
Continued Momentum Building In 2021

Operational Highlights

- Two new lease agreements signed year-to-date
- Received CE Mark approval for, and completed 100+ surgical procedures using, the ISU
- Established EU training center at Amsterdam Skills Centre in the Netherlands
- Received FDA clearance for General Surgery indication expansion
- Submitted FDA 510(k) filing for articulating instruments
- Published results of first milestone study comparing health economic outcomes versus Da Vinci as well as traditional laparoscopy

Financial Highlights

- Q1-2021 Revenue: \$2.1 million
 - Completed first buyout of a previously leased Senhance System
- Balance Sheet Highlights *(as of 3.31.2021)*
 - Cash & Restricted Cash ~ \$166.4 million
 - Debt – None
 - Cash Runway – into 2024



Upcoming Milestones Support Operational Growth

Clinical Adoption, Regulatory Success And Peer Reviewed Publications

- Regulatory Milestones (1H 2021)
 - File FDA 510(k) for next wave ISU Features
- Peer Reviewed Publications (2H 2021)
 - Health economic evidence in General Surgery and Gynecology
- Continued momentum and penetration of ISU and usage of Augmented Intelligence and Machine Vision technology in the US, EU and Asia
- Acceleration of new system installations and procedures volumes



Surgery Reimagined

Performance-Guided Surgery – next
level technology that completely
changes the idea of what's possible.