



41ST ANNUAL J.P. MORGAN HEALTHCARE CONFERENCE

Anthony Fernando, President & CEO

Shameze Rampertab, EVP & CFO

January 12, 2023

Forward Looking Statements

This presentation includes statements relating to the Senhance[®] Surgical System's market development and a general corporate update for Asensus Surgical. These statements and other statements regarding our future plans and goals constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and 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. Factors that could cause our results to differ materially from those described include, but are not limited to, whether we can successfully advance our Performance-Guided Surgery[™] initiative, the market development activities related to the Senhance Surgical System will be successful, the pace of adoption of our products by surgeons will increase, the success and market opportunity of our products, the impact of the ongoing pandemic on our business and our customers, the effect on our business of existing and new regulatory requirements, and other economic and competitive factors. For a discussion of the risks and uncertainties associated with the Company's 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 origination date of this presentation. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

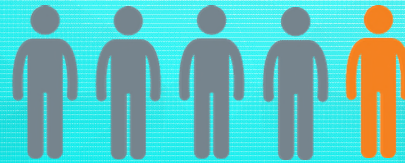




We believe in digitizing the interface between the surgeon and patient to pioneer a new era of **Performance-Guided Surgery** by unlocking the Clinical Intelligence to enable consistently superior outcomes and a new standard of surgery.

The Reality of Surgery

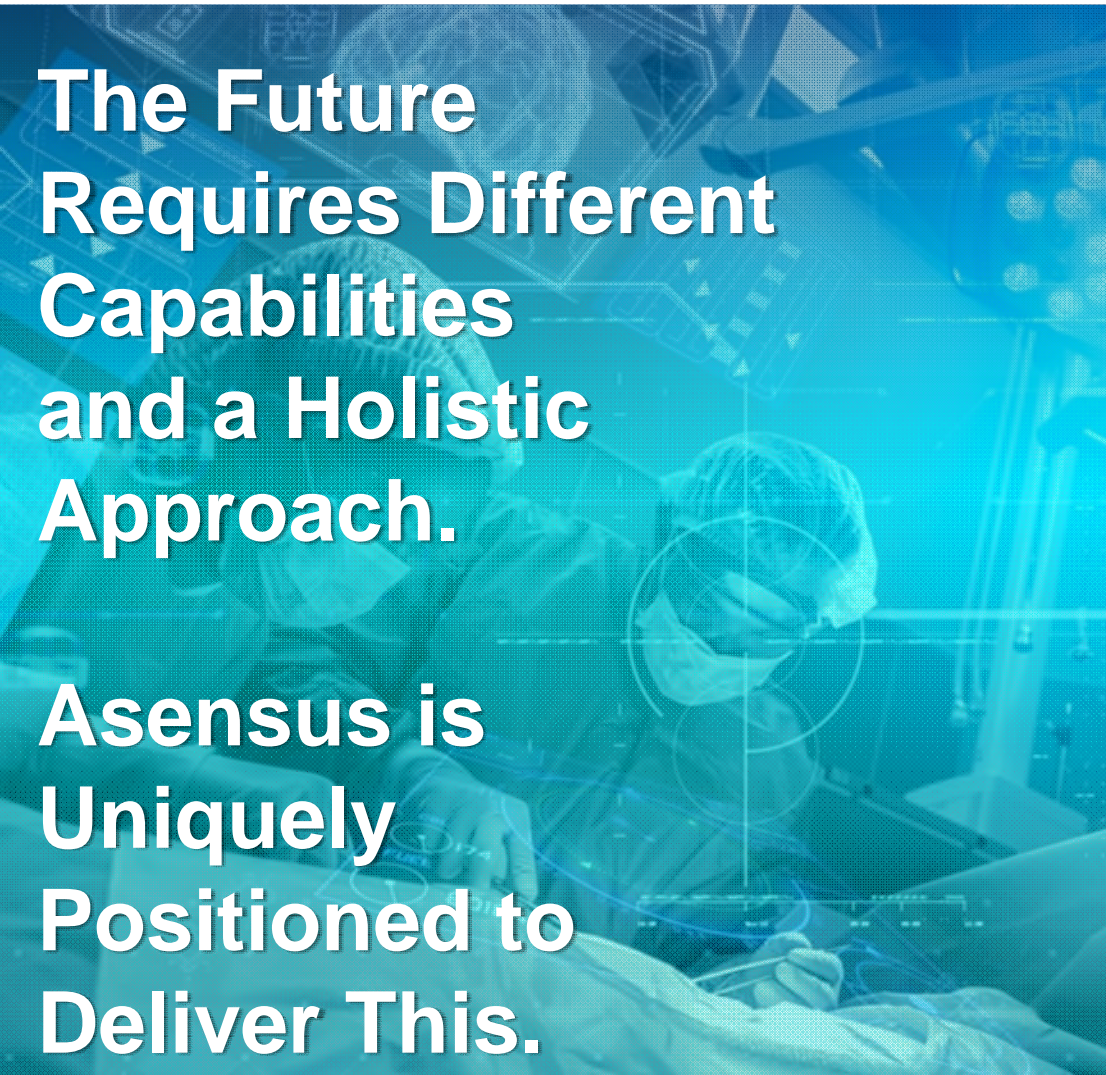
1 in 5 patients undergoing surgery has 1 or more complications*



Overall profit margin decreased from 5.8% for patients without complications to 0.1% for patients with complications.**

Essentially, hospitals make **no money if there is a complication.**

We Expect More From Surgery



- 1 **Increase safety** for better outcomes which lead to better patient and provider satisfaction
- 2 **Reduce surgical variability** and factors that contribute to poor outcomes
- 3 **Guide surgeons** to successfully navigate when unexpected events occur to effectively reduce surgical errors and complications
- 4 **Provide real-time clinical intelligence** and capabilities to create more predictable outcomes to meet value-based care constraints

Senhance Surgical System: Surgery Reimagined

Building The Bridge From Laparoscopy To Performance-Guided Surgery



Senhance®

Digital Fulcrum

Reusable Instruments

Digital Laparoscopy

3DHD Visualization

Eye-Tracking
Camera Control

Open-Platform Architecture

Haptic Feedback

Surgeon Ergonomics

Digitizing the Interface Between Surgeon and Patient

Delivering **Digital Laparoscopy** By Maintaining Familiar Motion, Tools, and Techniques



3DHD Visualization

- Provides surgeon with additional perception regarding depth and spatial recognition

Eye-Tracking Camera Control

- Camera movement controlled by surgeon's eye gaze
- Eliminates the need to manually adjust camera during a procedure

Haptic Feedback

- Only available on Senhance
- Natural sensation of pressure and tension
- Real-time sensory feedback
- Unparalleled level of safety

Digitizing Laparoscopic Instrumentation

Broad Instrumentation Portfolio Adds Unique Advantages For Surgeons And Patients

Core Laparoscopic

Broad portfolio of robotic lap instruments



- 70+ instruments
- Wide applicability
- Fully Reusable

3mm

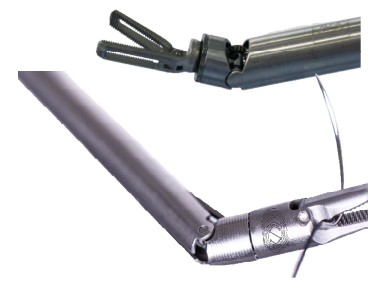
A new standard in robotic MIS



- Only platform with 3mm
- Reduction in invasiveness
- Potential reduction in post-operative pain
- Enables pediatric surgery

Articulating

Access to difficult-to-reach anatomy



- Two additional degrees of freedom
- Wrist-like manipulation
- Key surgeon preference item

Ultrasonic

Providing precise advanced energy



- Effectively ligate and divide tissue
- Minimizes injury to anatomy

Compelling Hospital Economics

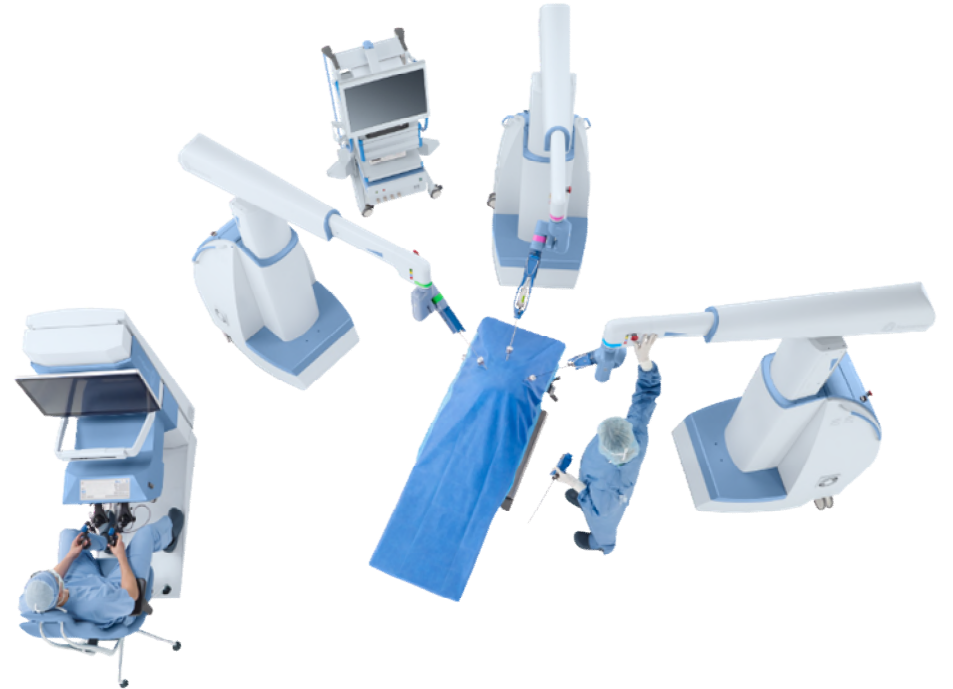
Purpose-built solution to drive down per-procedure costs associated with robotics

Reducing Per-Procedure Costs

- Fully reusable instruments enable lower per-procedure economics:
 - In-line with traditional laparoscopy
 - Significantly lower than competing robotic systems
- O.R. time in line with competitive robotic systems

Flexible System Costs

- Multiple system acquisition economic models:
 - Leasing and lease-to-buy options available
 - Competitive robotic system cost



Robust Global Applicability

>16 Million Global Annual Addressable Procedure Market



United States

FDA Approved



European Union

CE Marked



Japan

PMDA Approved



Rest of World

Russia, Taiwan, Others

Senhance System



Intelligent Surgical Unit



Procedural Indications for Use

General



GYN



*Thoracic**



Pediatric



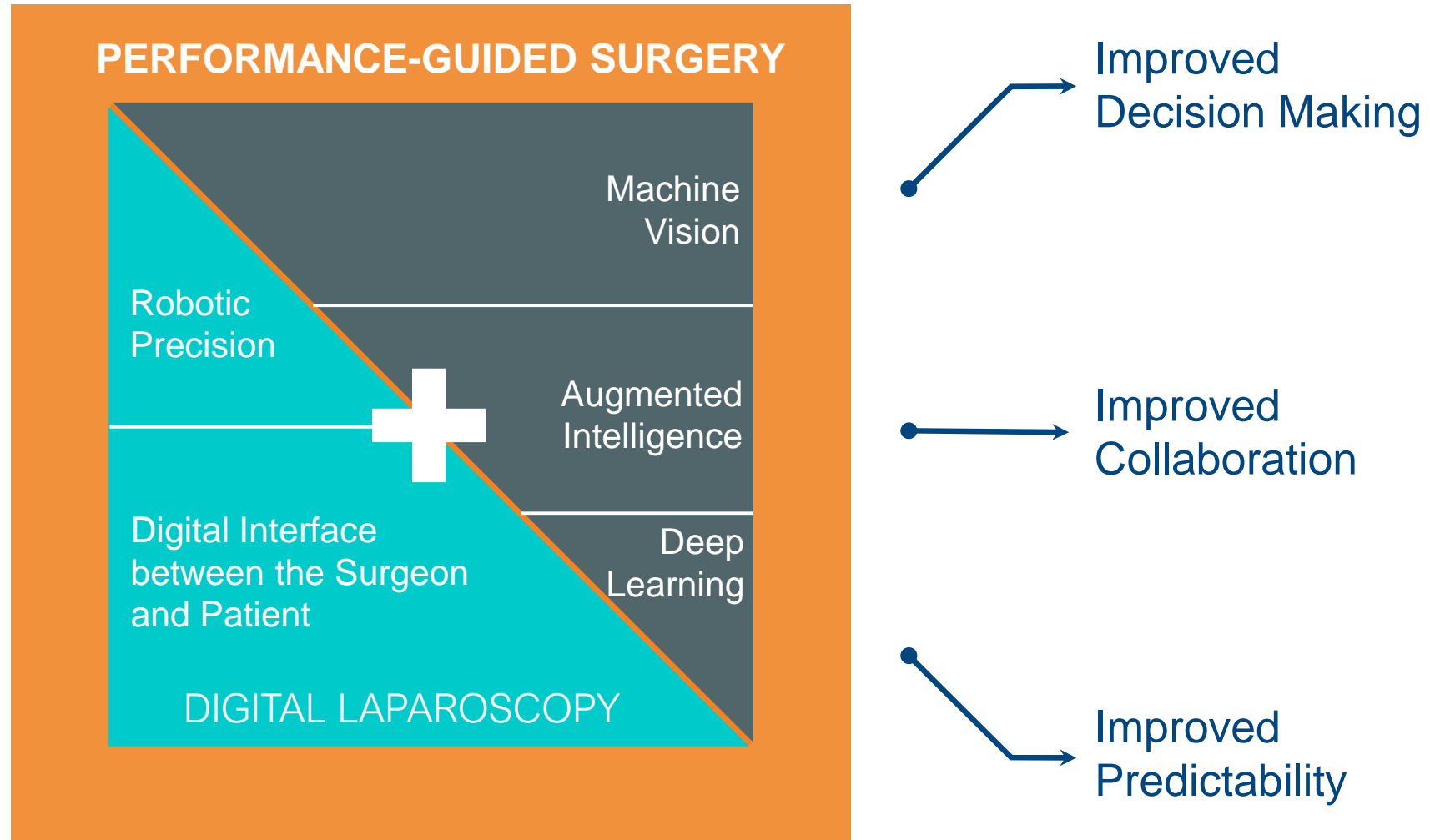
Urology



*Non-cardiac, upper abdominal procedures

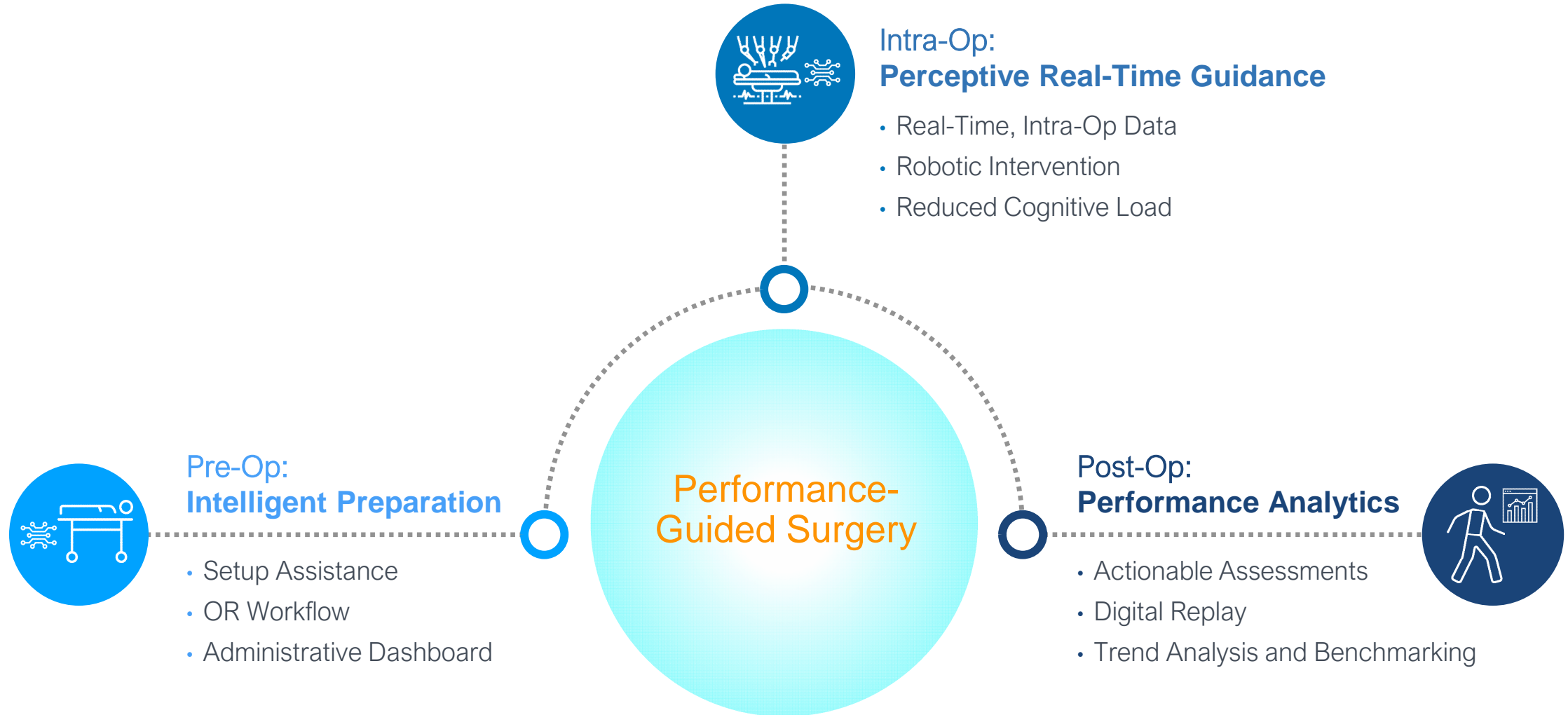
Performance-Guided Surgery (PGS)

Improving Decision Making, Collaboration, and Predictability



Clinical Intelligence Powering Peak Performance

PGS Improves Decision Making, Collaboration, and Predictability



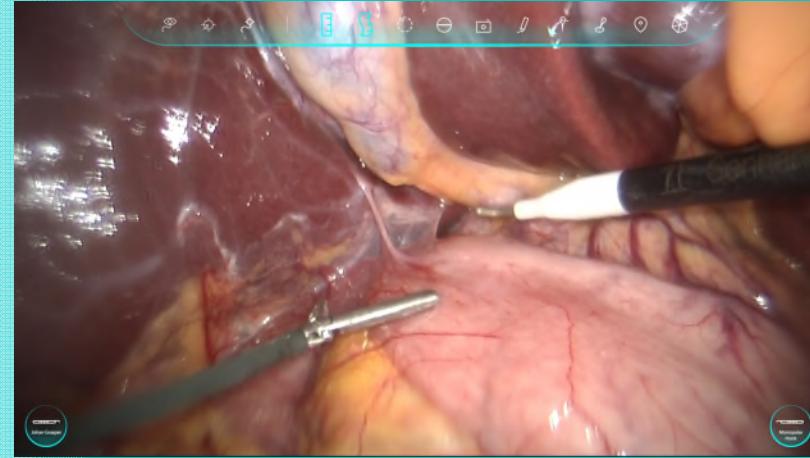
ISU: The First Machine Vision System In Minimally Invasive Surgery

Laying The Foundation For Digitizing Surgery → Enabling The Future of Performance-Guided Surgery

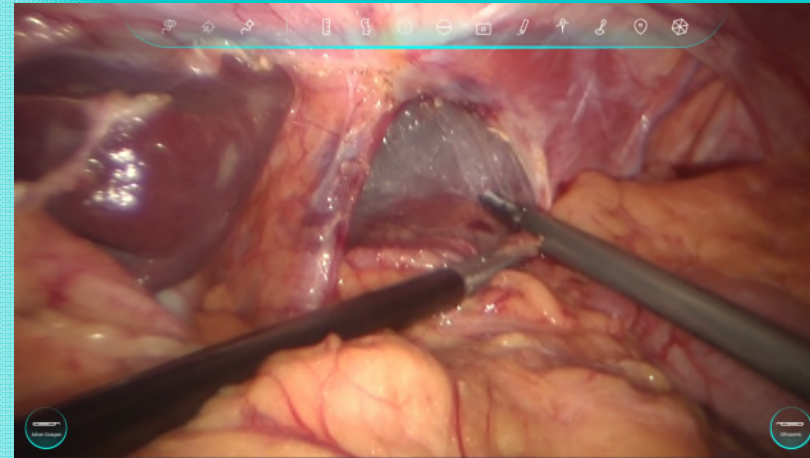


1st ever augmented intelligence system to deliver real-time intraoperative digital tools to surgeons

- Enhanced camera control
- 3D measurement
- Digital tagging
- Image enhancement



Vision Based
Real-Time 3D
Point to Point
Measurement



Real-Time Defect
Identification and
Sizing

Our Path To Market Leadership

Delivering A New Era In Digital Surgery

- 1 Educate surgeons on the benefits of Senhance
- 2 Increase global procedure volumes
- 3 Advance digital capabilities through data collection & analysis
- 4 Expand the portfolio

1 Educating Surgeons On The Benefits Of Senhance

Grow Compelling Set of Data to Demonstrate Clinical and Economic Value

90+
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 Stephan^{1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118,119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136,137,138,139,140,141,142,143,144,145,146,147,148,149,150,151,152,153,154,155,156,157,158,159,160,161,162,163,164,165,166,167,168,169,170,171,172,173,174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189,190,191,192,193,194,195,196,197,198,199,200,201,202,203,204,205,206,207,208,209,210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225,226,227,228,229,230,231,232,233,234,235,236,237,238,239,240,241,242,243,244,245,246,247,248,249,250,251,252,253,254,255,256,257,258,259,260,261,262,263,264,265,266,267,268,269,270,271,272,273,274,275,276,277,278,279,280,281,282,283,284,285,286,287,288,289,290,291,292,293,294,295,296,297,298,299,300,301,302,303,304,305,306,307,308,309,310,311,312,313,314,315,316,317,318,319,320,321,322,323,324,325,326,327,328,329,330,331,332,333,334,335,336,337,338,339,340,341,342,343,344,345,346,347,348,349,350,351,352,353,354,355,356,357,358,359,360,361,362,363,364,365,366,367,368,369,370,371,372,373,374,375,376,377,378,379,380,381,382,383,384,385,386,387,388,389,390,391,392,393,394,395,396,397,398,399,400,401,402,403,404,405,406,407,408,409,410,411,412,413,414,415,416,417,418,419,420,421,422,423,424,425,426,427,428,429,430,431,432,433,434,435,436,437,438,439,440,441,442,443,444,445,446,447,448,449,450,451,452,453,454,455,456,457,458,459,460,461,462,463,464,465,466,467,468,469,470,471,472,473,474,475,476,477,478,479,480,481,482,483,484,485,486,487,488,489,490,491,492,493,494,495,496,497,498,499,500,501,502,503,504,505,506,507,508,509,510,511,512,513,514,515,516,517,518,519,520,521,522,523,524,525,526,527,528,529,530,531,532,533,534,535,536,537,538,539,540,541,542,543,544,545,546,547,548,549,550,551,552,553,554,555,556,557,558,559,560,561,562,563,564,565,566,567,568,569,570,571,572,573,574,575,576,577,578,579,580,581,582,583,584,585,586,587,588,589,590,591,592,593,594,595,596,597,598,599,600,601,602,603,604,605,606,607,608,609,610,611,612,613,614,615,616,617,618,619,620,621,622,623,624,625,626,627,628,629,630,631,632,633,634,635,636,637,638,639,640,641,642,643,644,645,646,647,648,649,650,651,652,653,654,655,656,657,658,659,660,661,662,663,664,665,666,667,668,669,670,671,672,673,674,675,676,677,678,679,680,681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698,699,700,701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716,717,718,719,720,721,722,723,724,725,726,727,728,729,730,731,732,733,734,735,736,737,738,739,740,741,742,743,744,745,746,747,748,749,750,751,752,753,754,755,756,757,758,759,760,761,762,763,764,765,766,767,768,769,770,771,772,773,774,775,776,777,778,779,780,781,782,783,784,785,786,787,788,789,790,791,792,793,794,795,796,797,798,799,800,801,802,803,804,805,806,807,808,809,810,811,812,813,814,815,816,817,818,819,820,821,822,823,824,825,826,827,828,829,830,831,832,833,834,835,836,837,838,839,840,841,842,843,844,845,846,847,848,849,850,851,852,853,854,855,856,857,858,859,860,861,862,863,864,865,866,867,868,869,870,871,872,873,874,875,876,877,878,879,880,881,882,883,884,885,886,887,888,889,890,891,892,893,894,895,896,897,898,899,900,901,902,903,904,905,906,907,908,909,910,911,912,913,914,915,916,917,918,919,920,921,922,923,924,925,926,927,928,929,930,931,932,933,934,935,936,937,938,939,940,941,942,943,944,945,946,947,948,949,950,951,952,953,954,955,956,957,958,959,960,961,962,963,964,965,966,967,968,969,970,971,972,973,974,975,976,977,978,979,980,981,982,983,984,985,986,987,988,989,990,991,992,993,994,995,996,997,998,999,1000}

Abstract

Introduction: Robotic-assisted laparoscopic surgery (RALS) has been the standard of care for many years after the introduction of the first RALS system (Intuitive Surgical Inc., Sunnyvale, CA) in 1992. RALS has been shown to be safe and effective for a wide range of procedures, including urology, abdominal, thoracic, and gynecologic surgery. The purpose of this study was to evaluate the safety and efficacy of RALS for the treatment of inguinal hernia.

Materials and methods: The Senhance Digital Laparoscopy System (Senhance Surgical, Inc., Sunnyvale, CA) was used for the treatment of inguinal hernia. The study included 271 cases of robotic inguinal hernia TAPP repair using the Senhance platform from four different centers between March 2017 and March 2020. Key data points were intraoperative and postoperative complication rate, operating time, length of hospital stay, postoperative pain score and time required to get back to a daily routine that were inserted in the TransEnterix European Patient Registry for Robotic-Assisted Laparoscopic Procedures in Urology, Abdominal Surgery, Thoracic and Gynecologic Surgery (TRUST).

Results: The median age was 71 years (range 45-90 years). The median BMI was 23.1 kg/m². The median operating time was 74 ± 35 min (range 32-265 min). Postoperative complications occurred in five (1.85%) cases. The intraoperative complication rate was five (1.85%). The average subjective patient satisfaction score was 4.5 (range 3-5).

Conclusion: The Senhance Digital Laparoscopy System is a safe and effective platform for the treatment of inguinal hernia. The results of this study demonstrate the safety and efficacy of RALS for the treatment of inguinal hernia.

Inguinal hernia TAPP repair using Senhance[®] robotic platform: first multicenter report from the TRUST registry

N E Samalavicius^{1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118,119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136,137,138,139,140,141,142,143,144,145,146,147,148,149,150,151,152,153,154,155,156,157,158,159,160,161,162,163,164,165,166,167,168,169,170,171,172,173,174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189,190,191,192,193,194,195,196,197,198,199,200,201,202,203,204,205,206,207,208,209,210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225,226,227,228,229,230,231,232,233,234,235,236,237,238,239,240,241,242,243,244,245,246,247,248,249,250,251,252,253,254,255,256,257,258,259,260,261,262,263,264,265,266,267,268,269,270,271,272,273,274,275,276,277,278,279,280,281,282,283,284,285,286,287,288,289,290,291,292,293,294,295,296,297,298,299,300,301,302,303,304,305,306,307,308,309,310,311,312,313,314,315,316,317,318,319,320,321,322,323,324,325,326,327,328,329,330,331,332,333,334,335,336,337,338,339,340,341,342,343,344,345,346,347,348,349,350,351,352,353,354,355,356,357,358,359,360,361,362,363,364,365,366,367,368,369,370,371,372,373,374,375,376,377,378,379,380,381,382,383,384,385,386,387,388,389,390,391,392,393,394,395,396,397,398,399,400,401,402,403,404,405,406,407,408,409,410,411,412,413,414,415,416,417,418,419,420,421,422,423,424,425,426,427,428,429,430,431,432,433,434,435,436,437,438,439,440,441,442,443,444,445,446,447,448,449,450,451,452,453,454,455,456,457,458,459,460,461,462,463,464,465,466,467,468,469,470,471,472,473,474,475,476,477,478,479,480,481,482,483,484,485,486,487,488,489,490,491,492,493,494,495,496,497,498,499,500,501,502,503,504,505,506,507,508,509,510,511,512,513,514,515,516,517,518,519,520,521,522,523,524,525,526,527,528,529,530,531,532,533,534,535,536,537,538,539,540,541,542,543,544,545,546,547,548,549,550,551,552,553,554,555,556,557,558,559,560,561,562,563,564,565,566,567,568,569,570,571,572,573,574,575,576,577,578,579,580,581,582,583,584,585,586,587,588,589,590,591,592,593,594,595,596,597,598,599,600,601,602,603,604,605,606,607,608,609,610,611,612,613,614,615,616,617,618,619,620,621,622,623,624,625,626,627,628,629,630,631,632,633,634,635,636,637,638,639,640,641,642,643,644,645,646,647,648,649,650,651,652,653,654,655,656,657,658,659,660,661,662,663,664,665,666,667,668,669,670,671,672,673,674,675,676,677,678,679,680,681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698,699,700,701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716,717,718,719,720,721,722,723,724,725,726,727,728,729,730,731,732,733,734,735,736,737,738,739,740,741,742,743,744,745,746,747,748,749,750,751,752,753,754,755,756,757,758,759,760,761,762,763,764,765,766,767,768,769,770,771,772,773,774,775,776,777,778,779,780,781,782,783,784,785,786,787,788,789,790,791,792,793,794,795,796,797,798,799,800,801,802,803,804,805,806,807,808,809,810,811,812,813,814,815,816,817,818,819,820,821,822,823,824,825,826,827,828,829,830,831,832,833,834,835,836,837,838,839,840,841,842,843,844,845,846,847,848,849,850,851,852,853,854,855,856,857,858,859,860,861,862,863,864,865,866,867,868,869,870,871,872,873,874,875,876,877,878,879,880,881,882,883,884,885,886,887,888,889,890,891,892,893,894,895,896,897,898,899,900,901,902,903,904,905,906,907,908,909,910,911,912,913,914,915,916,917,918,919,920,921,922,923,924,925,926,927,928,929,930,931,932,933,934,935,936,937,938,939,940,941,942,943,944,945,946,947,948,949,950,951,952,953,954,955,956,957,958,959,960,961,962,963,964,965,966,967,968,969,970,971,972,973,974,975,976,977,978,979,980,981,982,983,984,985,986,987,988,989,990,991,992,993,994,995,996,997,998,999,1000}

Affiliations + expand
PMID: 34591213 DOI: 10.1007/s10029-021-02510-9

Abstract

Purpose: The purpose of this article was to provide feasibility and safety results of robotic transabdominal preperitoneal inguinal hernia repair (Robotic TAPP).

Methods: We included 271 cases of robotic inguinal hernia TAPP repair using the Senhance[®] robotic platform from four different centers between March 2017 and March 2020. Key data points were intraoperative and postoperative complication rate, operating time, length of hospital stay, postoperative pain score and time required to get back to a daily routine that were inserted in the TransEnterix European Patient Registry for Robotic-Assisted Laparoscopic Procedures in Urology, Abdominal Surgery, Thoracic and Gynecologic Surgery (TRUST).

Results: We report 203 cases of unilateral and 68 cases of bilateral inguinal hernia repairs. Mean operative time was 74 ± 35 min (range 32-265 min), postoperative complications occurred in five (1.85%) cases, the intraoperative complication rate was five (1.85%). The average subjective patient-

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

PROCEDURE COST

\$1,393

\$559

\$498

da Vinci

Senhance

Lap

CASE TIME IN MINUTES

96.0

91.5

da Vinci

Senhance

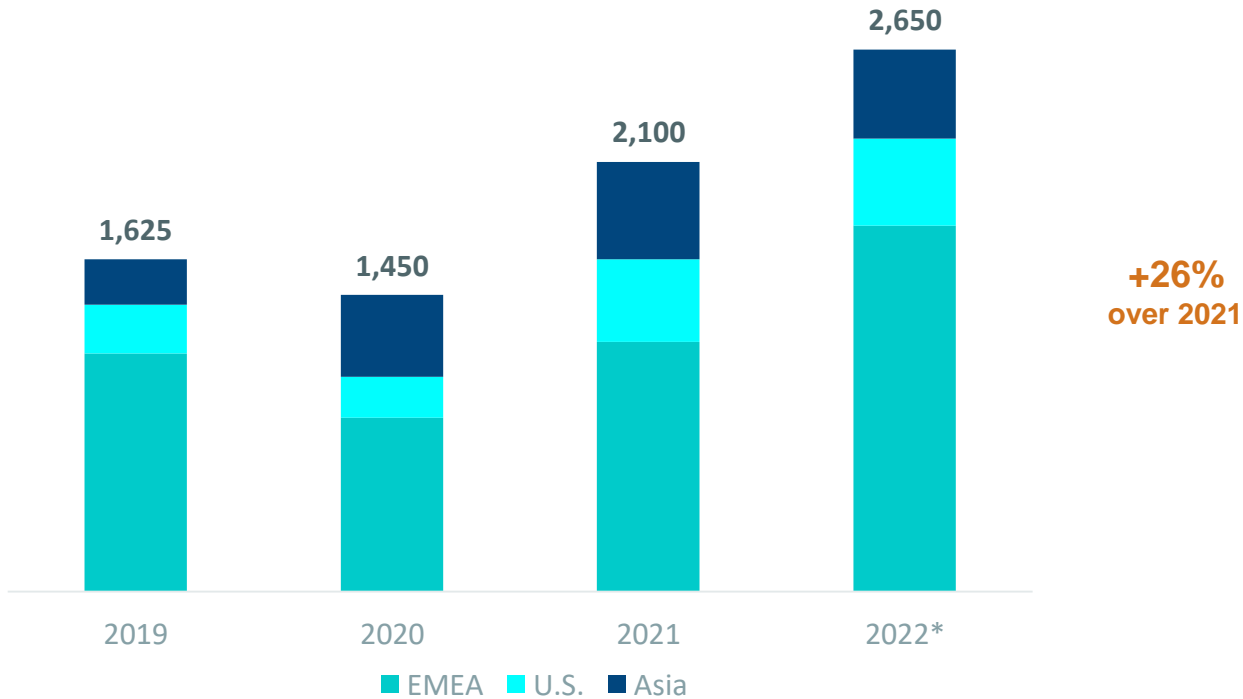
- Senhance per procedure costs were less than half of da Vinci
- Senhance per procedure costs were in line with laparoscopy
- Case times between Senhance and da Vinci were comparable

2

Increasing Global Procedure Volumes

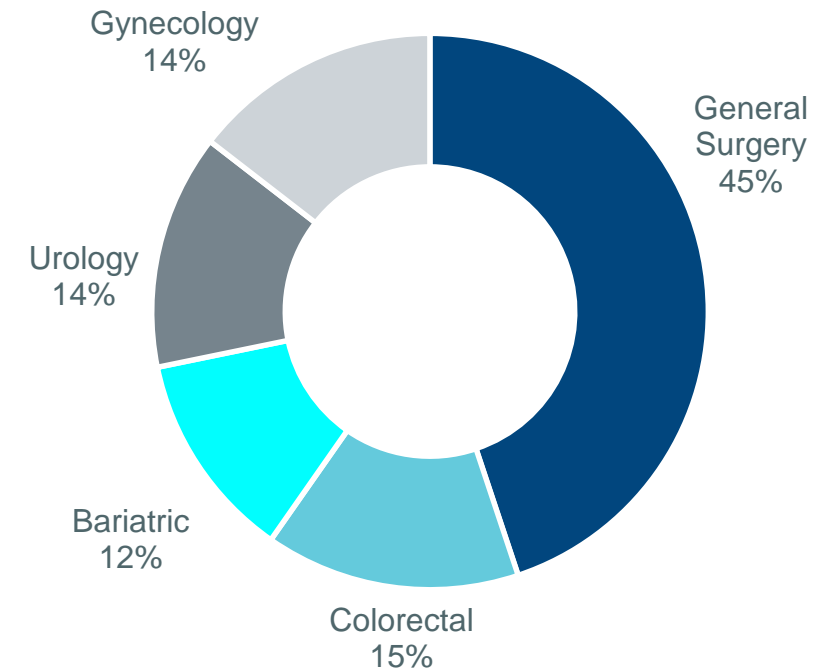
Senhance Demonstrating Strong Clinical Performance Across The Three Major Geographies

GLOBAL CLINICAL CASE VOLUME TREND



Accelerating procedure volumes

2022* CASE MIX



Utilization across multiple specialty areas, demonstrating broad applicability and adoption

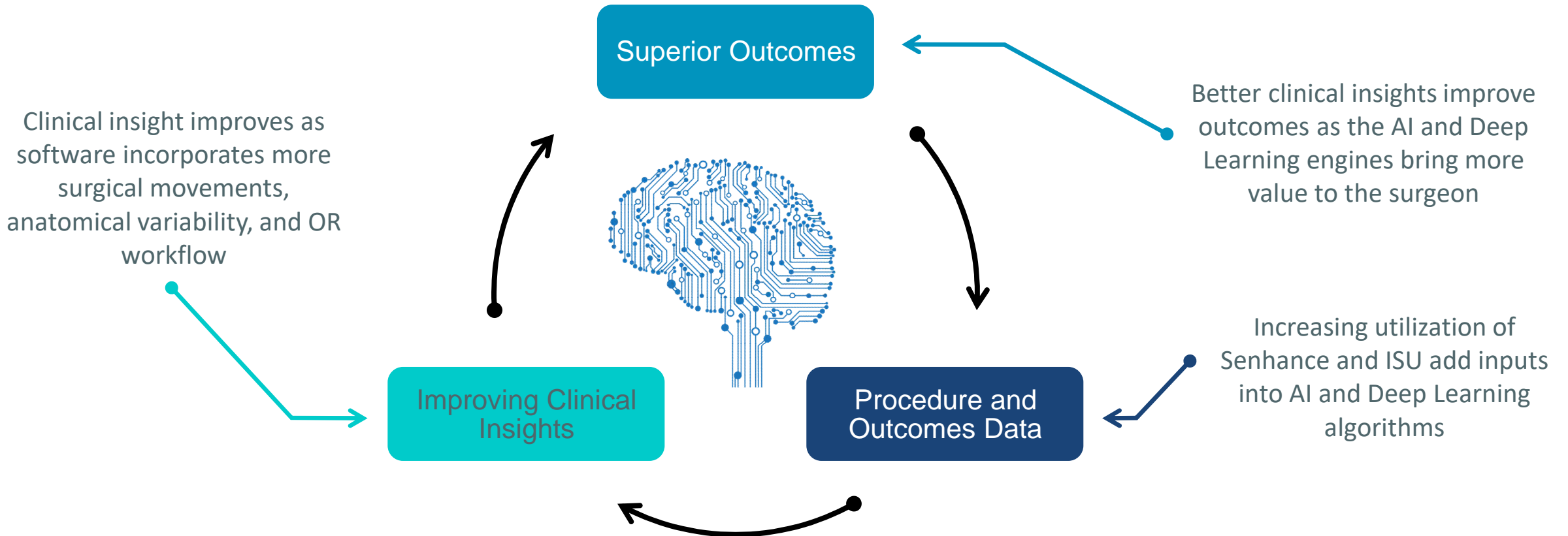
* 2022 Preliminary

3

Advancing Digital Capabilities Through Data Collection & Analysis

Increasing Surgical Data Improves Clinical Insight and Drives Consistently Superior Outcomes

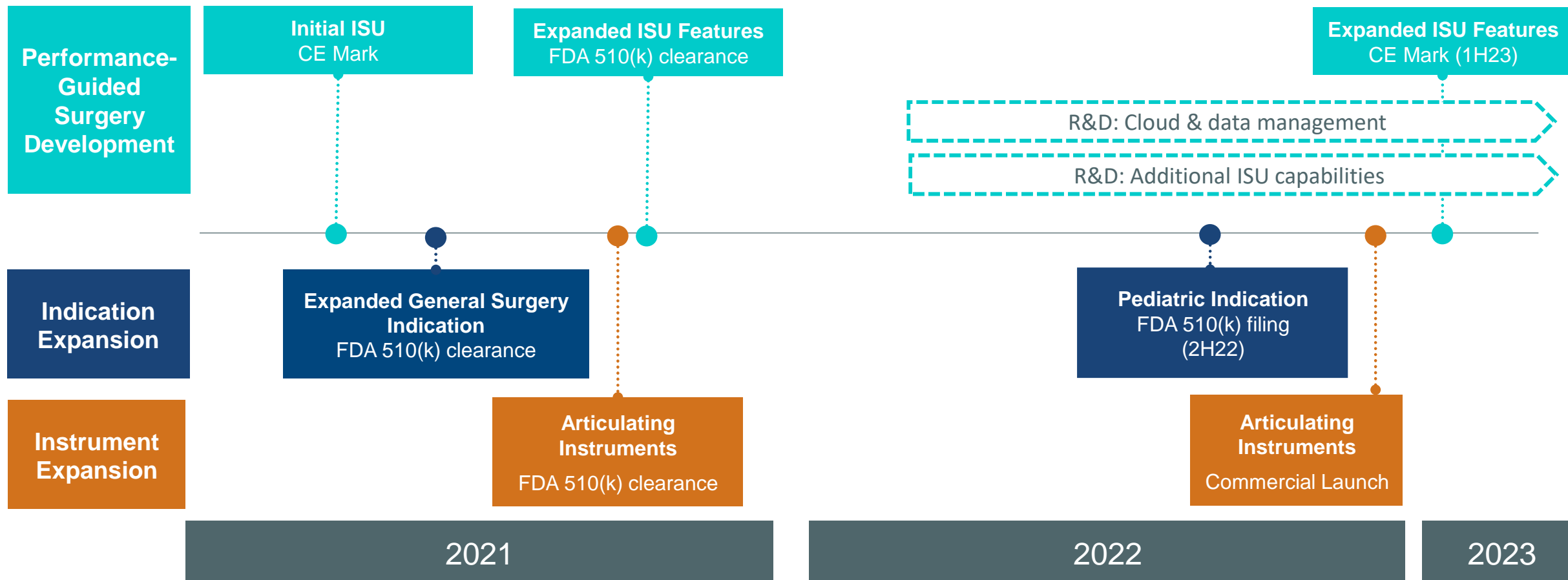
Performance-Guided Surgery Augmented Intelligence & Deep Learning Engine



4

Expanding The Portfolio

Broadening Applicability Through Digital Technology, Regulatory And Instrument Expansion



2022 Business Update



2022 Performance (Unaudited)

- Over 2,650 procedures were performed globally +26% over prior year
- Revenue: ~\$6.8-\$7.4 million
- Nine Senhance Surgical placements initiated
- Submitted FDA 510(k) application for pediatric indication in the U.S.
- December 31, 2022 Balance Sheet Highlights
 - Cash, cash equivalents, short-term and long-term investments ~\$74.4 million
 - No Debt

Asensus Surgical (NYSE American: ASXC)

Early-Commercial Stage Company Developing the Future of Surgery



Fully Integrated
Machine Vision &
AI* in Surgery

*Augmented Intelligence



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



Compelling
Per Procedure
Economics



8,650+
Surgeries
Performed



100+

Active Surgeon
Users



6 Global
Training Centers

Asensus Surgical

NYSE American: ASXC

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