

JULY 2023

Asensus Surgical

Changing the idea of what's possible in Surgery

PRESENTED BY:

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Asensus Surgical

Forward Looking Statements

This presentation includes statements relating to the LUNA™ Surgical System next-generation program under development and an update on Asensus' strategic plan. 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 risks and uncertainties related to our ability to successfully advance our LUNA System program through

development, testing and regulatory approval on the timeline provided, or at all, the risk that we will not be able to successfully enter into definitive agreements with our collaborators, that the pace of adoption of our products by surgeons will increase, the success and market opportunity of our products, including the ISU and LUNA System, 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.

We are Delivering the Future of Surgery

10,000+
Procedures

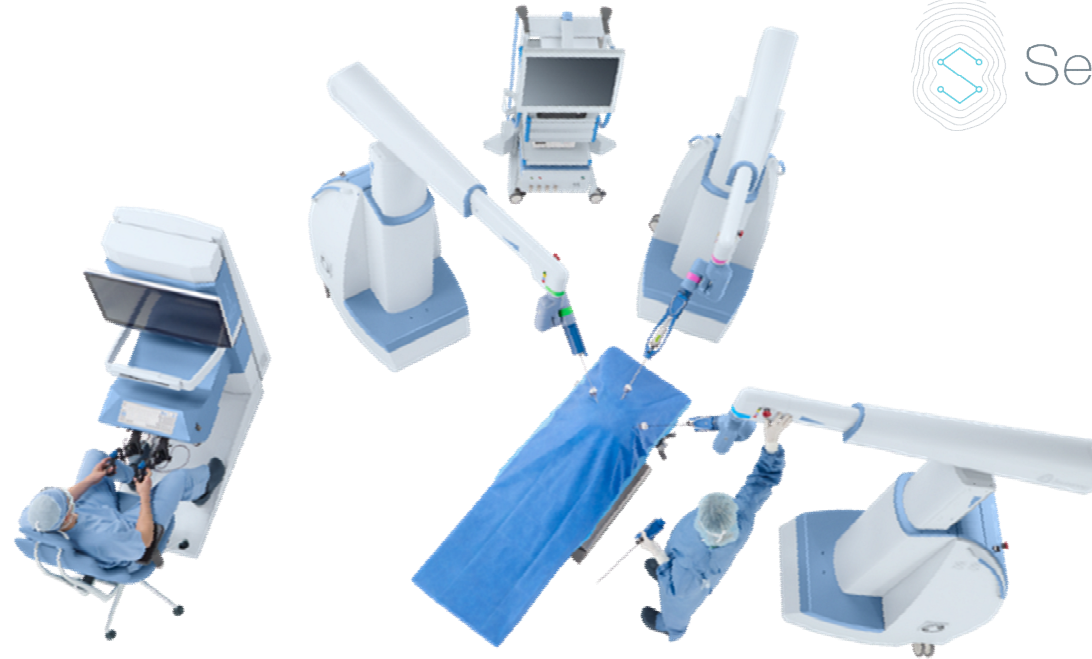
Global
Regulatory
Approvals

100+
Surgeons

300+
Patents*

2,500+
Patient
Registry

90+
Publications



Accelerating procedure
volumes

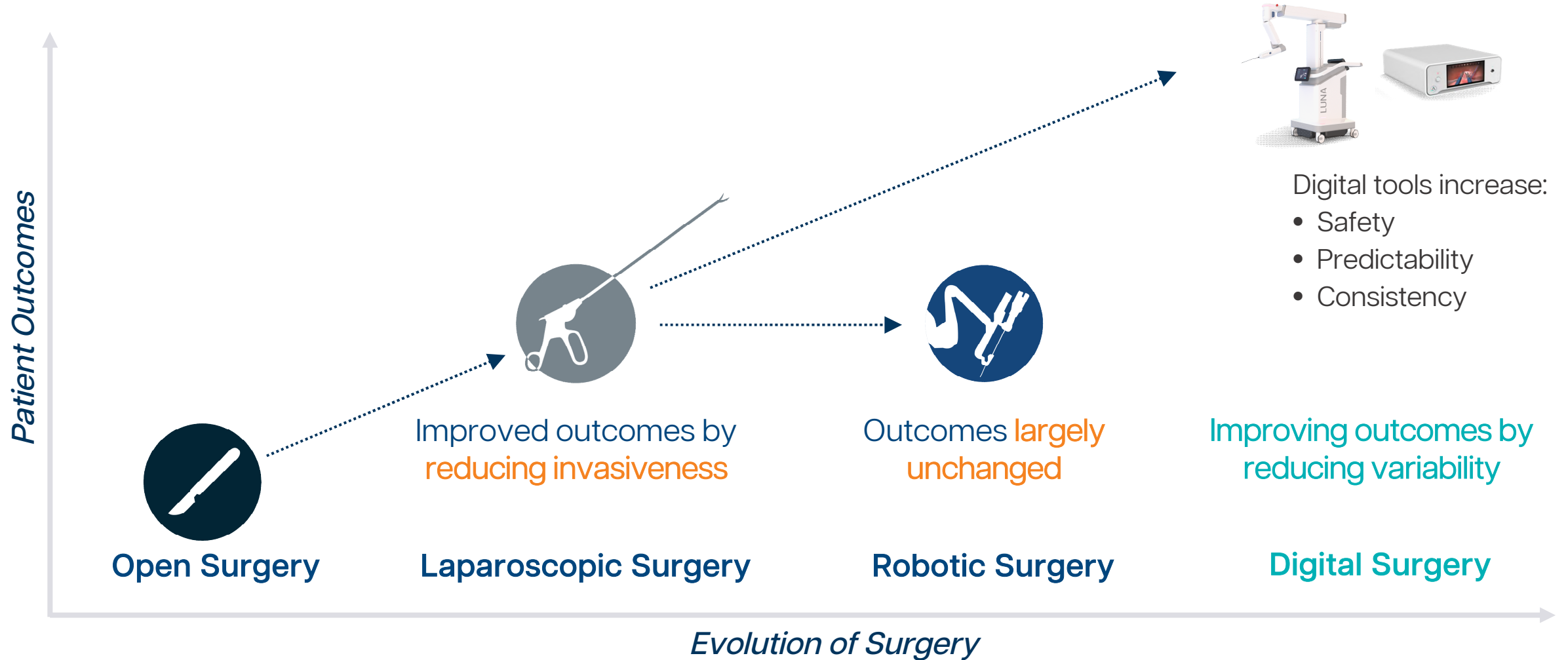
2020 → 2021 **+47%**
2021 → 2022 **+29%**

Utilization across multiple
specialty areas

GYN, Urology, Colorectal
General, Bariatric

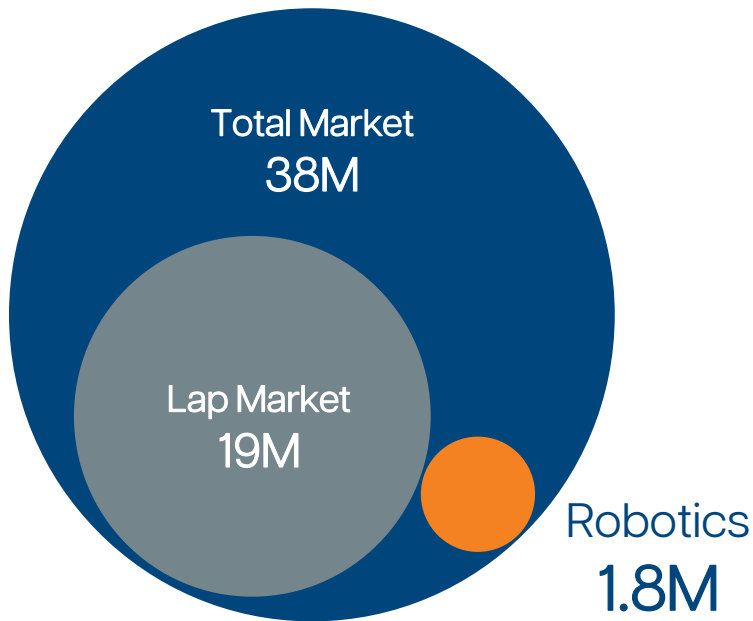
A Revolution in the Evolution of Surgery

Improving Patient Outcomes that Robotics was not able to accomplish

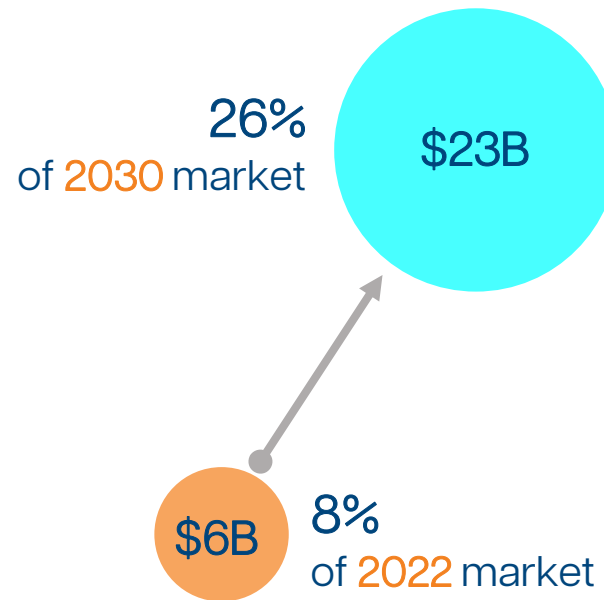


Market Opportunity

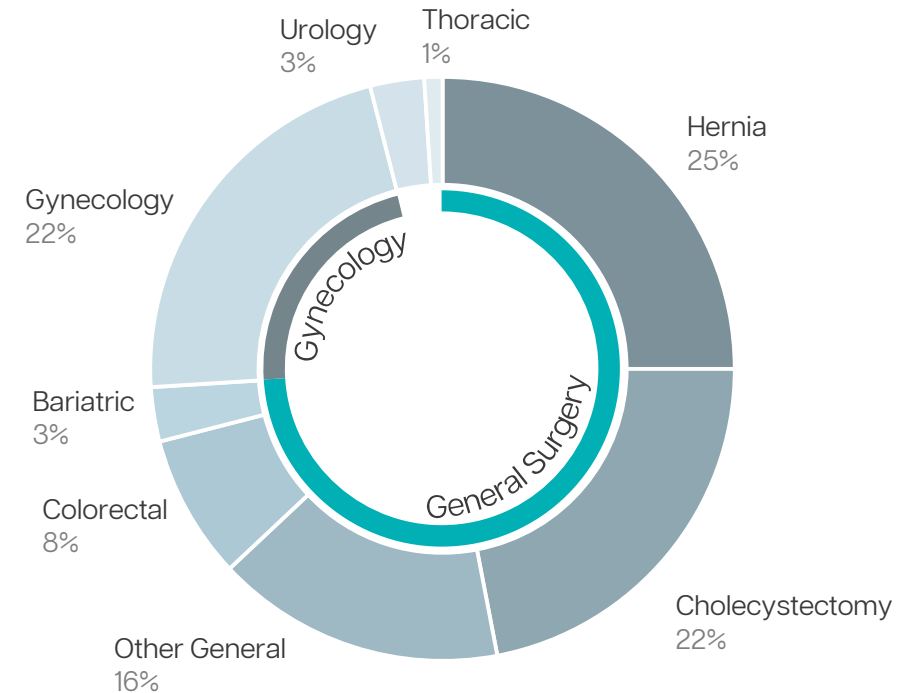
Soft Tissue Surgery (WW Procedure^{6,8,10})



Robotic Surgery Growth (WW Revenue^{5,8,10})



Soft Tissue Surgery Segments (Specialty Breakdown by procedure volume⁵)



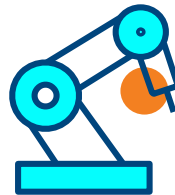
Challenges in Surgery Today

Robotics Not
Improving Outcomes



1.9M Surgical
Complications Annually^{3,6,8,10}

High Cost of
Current Robotics



Up to 2X Greater
Procedural Cost⁷

Impending
Surgeon Shortage



>40% Physician
Burnout^{2,13}

Our Solution:

Performance-Guided Surgery

Real-Time Decision Support
Tools and Robotic Precision
That Drive Consistently
Superior Outcomes



01 Robotic Manipulation



02 Intra-operative Clinical
Guidance



03 Cloud Integration

Enabling Performance-Guided Surgery

The only way to **improve outcomes** is to combine **Robotic Precision** with real-time **Surgical Decision Support** with a solution accessible to more patients

LUNA™
Enabling Surgery



State of the art robotics platform



ISU™
Empowering Surgeons



Intra-operative digital toolkit for
“Real-time” Augmented Intelligence

LUNA System Overview

Instinctive Surgeon Console



Collaborative Robotic Arms



Enabling Instruments



↓ 86%

Incision size

↓ 38%

Articulating instruments diameter

↑ 25%

Bed-side access

=

Dexterity w/out need for docking

↑ 300%

Range of motion

=

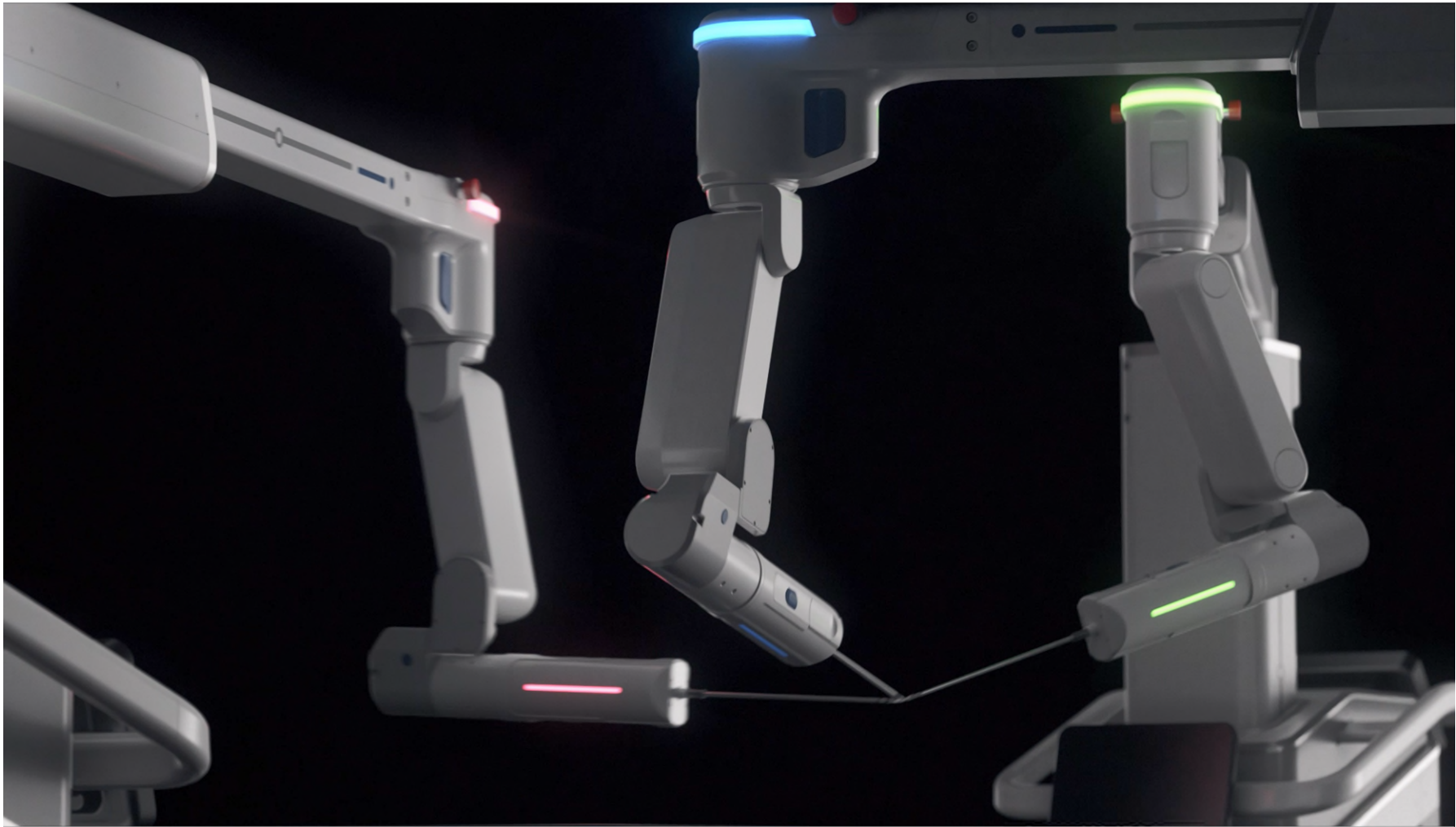
Per case cost⁷

vs. Competitive Robotic Systems

vs. Senhance

vs. Lap

LUNA Video



ISU – The Missing Piece in the OR

Empowering Surgeons



The Intelligent Surgical Unit

Informing surgical decisions

Digital measurements guiding surgeons and surgical maneuvers.

Avoiding preventable errors

Identification of critical anatomy to mitigate risk of tissue damage*.

Improving OR efficiency

Hands-free camera control enables OR staff optimization.

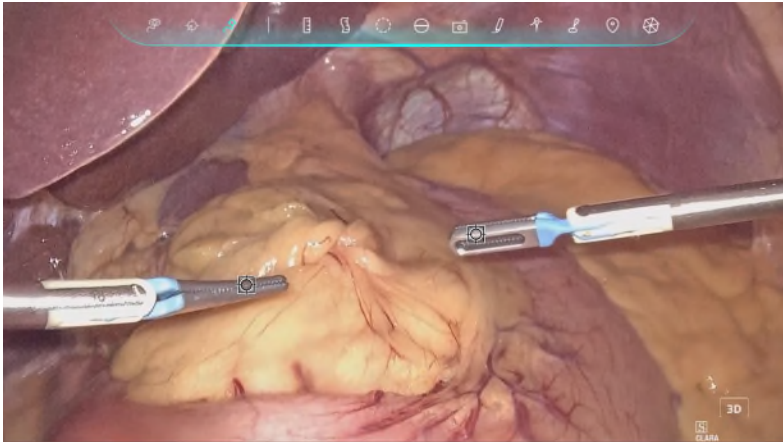
Enriching medical education

Digital tags and annotations* enhancing learnings, OR communication.

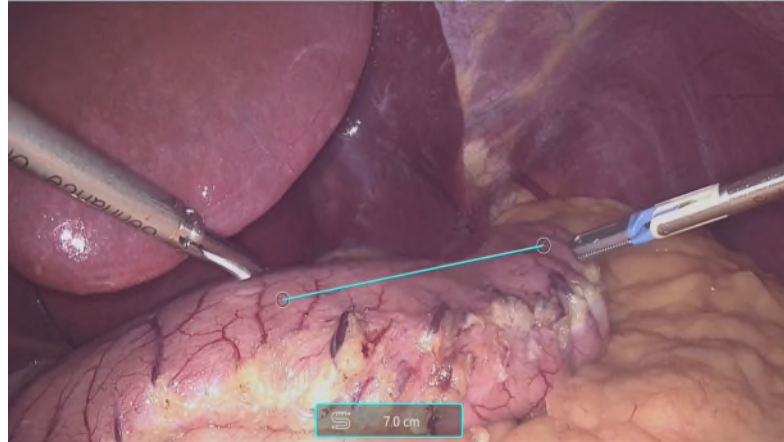
ISU Videos

Providing Intra-operative Decision Support

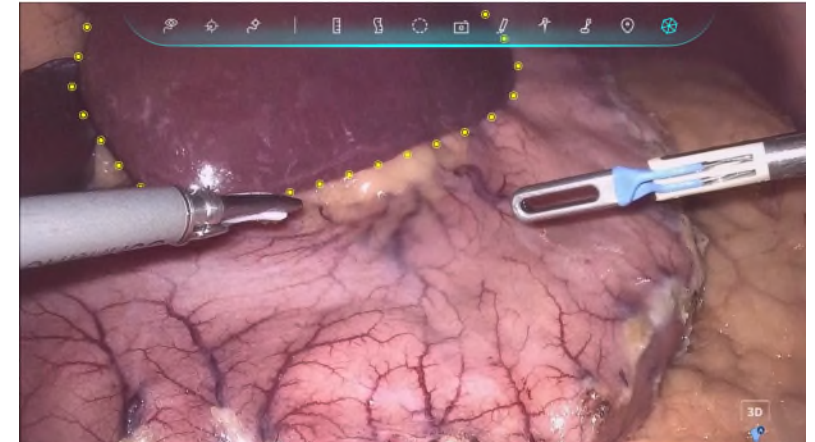
Automated Camera Control – Follow Me










Analytical Toolkit – 3D Measurement



Safety Toolkit – No Fly Zones



Competitive Landscape

Company		 INTUITIVE SURGICAL® (Public)	 Medtronic (Public)	 J&J (Public)	 CMR SURGICAL (Private)	 VICARIOUS SURGICAL (Public)	 Distalmotion (Private)	
Technology	Senhance <i>Multi-Port</i>	LUNA <i>Multi-Port</i>	Multi-Port, Single-Port	Multi-Port	Multi-Port	Multi-Port	Single-Port	Multi-Port
Specialty	General, GYN, URO, Pediatric, Thoracic	General, GYN, URO, Pediatric, Thoracic	General, GYN, URO, Pediatric, Thoracic	General, GYN, URO	Unknown	General, GYN, URO	Hernia	General, GYN, URO
Procedure Costs	\$	\$	\$\$\$	\$\$	TBD	\$\$	\$\$\$	\$\$
FDA*	Y	2024	Y	2024	TBD	2024	2025	2024
CE*	Y	2024	Y	Y	TBD	Y	TBD	Y
Instrument Sizes	3mm, 5mm	3mm 5mm Wrist	8mm Wrist	8mm Wrist	TBD	6.8mm	15mm	8mm Wrist
Haptic Feedback	Y	Y	N	N	N	N	N	N
Real-Time Digital Tools	Y	Y	N	N	N	N	N	N

Performance-Guided Surgery

A Comprehensive Solution for Surgeons, Hospitals, & Patients

Challenges in Surgery

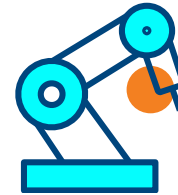
Robotics Not Improving Outcomes



- Patient & Surgeon Centric Gen 2
- Digitally safer surgical maneuvers
- Less invasive instruments

Reduce Complications and Improve Outcomes

High Cost of Current Robotics



- Low-cost architecture
- OR standardization
- AI based procedure guidance

Deliver Hospital Economics & Efficiency

Impending Surgeon Shortage



- Ergonomic workstation
- Lower training burden
- Surgical decision support

Reduce Surgeon Fatigue and Hospital Burden

LUNA + ISU

Performance-Guided Surgery

Value Drivers in Key Markets

Unmatched Clinical Utility, Simplicity, and Savings in a Wide Range of Specialties



Gynecology



Colorectal



Bariatrics



General

Addressable Market
(Annual Volumes)

5 M Procedures

2 M Procedures

1 M Procedures

18 M Procedures

Market Dynamics

- Exp. shortage of OB-GYN physicians
- Demand for RAS exp. to expand.^{5,6,12,14}

- Compelling reimbursement
- RAS highly valued in complex procedures.³

- Global obesity epidemic driving growth of bariatric market.^{5,6}

- Hernia repairs and cholecystectomies representing ~50% of global market.⁶

Clinical Challenges

Surgical complications in >1 of 10 patients.^{3,4}

Higher rates of postoperative complications and costs.³

Lack of standardized operative technique.¹¹

RAS adds time, complexity and cost with marginal clinical benefits.^{1,9}

LUNA

TrueWrist 5mm outperforms 8mm in the narrow pelvic surgery

TrueWrist 5mm enable complex surgical tasks

LUNA arms enable surgery on wider range of BMI

LUNA platform drives efficiency and lowers cost

ISU

Provides surgical decision support

Helping reduce physical and cognitive fatigue

Enabling precise & reproducible characterization of the anatomy

Automates visualization and simple tasks

Expanding Sites of care

LUNA Positioned to Serve Hospitals and Alternate Surgical Settings

Market trends:

- Surgical volume growth in US **Hospital Outpatient (HOPDs) and Ambulatory Surgery Centers (ASCs)** will continue to outpace growth in inpatient setting.
- Service lines such as general surgery seeing continued shift to these outpatient alternatives.
- High volume general surgeries expected to shift further from HOPDs to ASCs.

LUNA: Robust solution to drive operational efficiencies and lower cost in both **inpatient** and **outpatient** settings.



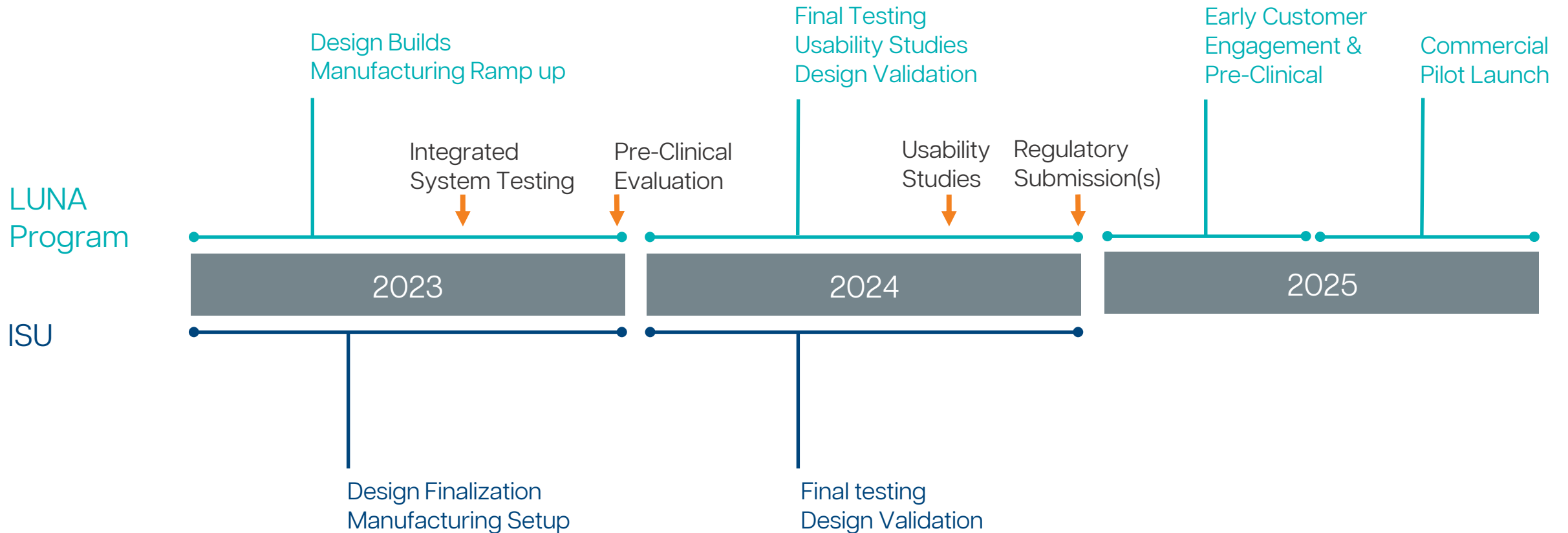
✓ Ease of system setup and reduced system footprint for rapid room turnover

✓ Per case cost at par with traditional laparoscopy

✓ Native, data-driven performance dashboards





Developing Next Generation Technology

Broadening Applicability of Senhance and Developing the Next Wave of PGS Technology



De-Risked Regulatory Pathway for LUNA

Ability to Leverage Senhance Clearances on LUNA Regulatory Strategy

	 United States <i>FDA Approved</i>	 European Union <i>CE Marked</i>	 Japan <i>PMDA Approved</i>	 Rest of World <i>Russia, Taiwan, Others</i>
Senhance System	✓	✓	✓	✓
Intelligent Surgical Unit	✓	✓	✓	✓
<hr/>				
Procedural Indications for Use				
<i>General</i>	✓	✓	✓	✓
<i>GYN</i>	✓	✓	✓	✓
<i>Thoracic*</i>		✓	✓	✓
<i>Pediatric</i>	✓	✓	✓	
<i>Urology</i>		✓	✓	✓

Disruptive Economic Model

LUNA and ISU Designed to Drive Adoption via High Clinical Performance and Responsible Economics

LUNA Surgical System

SUBSCRIPTION

- Signup Fee
- Annual Service Fee
- Per Case Fee
- Specialty Instruments (add on)
- AI / Cloud Subscription (add on)



Low Entry Point, Competitive Case Fee

SALE – DIRECT / DISTRIBUTOR

- Capital System Sale
- Annual Service Fee
- Per Case Fee
- Specialty Instruments (add on)
- AI / Cloud Subscription (add on)



Attractive Entry Point, Lower Case Fee, Recurring Distributor Incentive

Standalone ISU

via PARTNERS

- System Transfer Price
- Annual Service Fee
- AI Subscription (add on)
- Data / Cloud Subscription (add on)



Recurring High Margin Revenue Stream

Financial Snapshot

FY 2022 Performance

- 29% Year-over-year growth in surgical procedures (>3,100 procedures globally)
- Nine Senhance initiations
- Revenue of \$7.1 million

1Q 2023 Performance

- 20% Year-over-year growth in surgical procedures (>900 in the quarter)
- Revenue of \$1.0 million

Mar 31, 2023 Balance Sheet Highlights

- No debt
- Cash, cash equivalents, short-term and long-term investments, excluding restricted cash: \$57.4 million

Upcoming Milestones

LUNA System

- Integrated System testing – Q3 2023
- Finalization of Contract Manufacturing Partner – Q3 2023
- Pre-Clinical Evaluation – Q4 2023

Updated ISU Platform for LUNA

- Strategic Partnership with Graphics Hardware Provider – Q3 2023
- Finalization of Contract Manufacturing Partner – Q4 2023

Senhance System Placements

- 10-12 Senhance placements in 2023

Conclusion

Surgical outcomes can be improved. Asensus is the right company to advance that vision.

We are delivering Performance-Guided Surgery through the combination of advanced Robotic Precision with real-time Surgical Decision Support:

- **LUNA:** Next Generation digital surgery platform and instruments
- **ISU:** Intra-operative digital toolkit for “Real-time” Augmented Intelligence

We have a clear pathway to execute and achieve our vision.



Asensus Surgical

NYSE American: ASXC

Information for Investors

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Clinical Resources

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References

1. Abdelmoaty WF, Dunst CM, Neighorn C, Swanstrom LL, Hammill CW. Robotic-assisted versus laparoscopic unilateral inguinal hernia repair: a comprehensive cost analysis. *Surg Endosc*. 2019 Oct;33(10):3436-3443. doi: 10.1007/s00464-018-06606-9. Epub 2018 Dec 7. PMID: 30535936.
2. Al-Ghunaim TA, Johnson J, Biyani CS, Alshahrani KM, Dunning A, O'Connor DB. Surgeon burnout, impact on patient safety and professionalism: A systematic review and meta-analysis. *Am J Surg*. 2022 Jul;224(1 Pt A):228-238. doi: 10.1016/j.amjsurg.2021.12.027. Epub 2021 Dec 27. PMID: 34974884.
3. Asensus Surgical 2022 primary and secondary market research report (data on file).
4. Bijen CB, Vermeulen KM, Mourits MJ, de Bock GH. Costs and effects of abdominal versus laparoscopic hysterectomy: systematic review of controlled trials. *PLoS One*. 2009 Oct 5;4(10):e7340. doi: 10.1371/journal.pone.0007340. PMID: 19806210; PMCID: PMC2752190.
5. Clarivate / DRG Global Laparoscopic Surgical Robotic Devices report, 2022.
6. Clarivate / DRG Laparoscopic Devices Market Insight reports, 2021, 2022.
7. Coussons H, Feldstein J, McCarus S. 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. *Int J Med Robot*. 2021 Aug;17(4):e2261. doi: 10.1002/rcs.2261. Epub 2021 Apr 23. PMID: 33860631.
8. Goldman Sachs: State of Robotic Surgery, 2022.
9. Huang Y, Chua TC, Maddern GJ, Samra JS. Robotic cholecystectomy versus conventional laparoscopic cholecystectomy: A meta-analysis. *Surgery*. 2017 Mar;161(3):628-636. doi: 10.1016/j.surg.2016.08.061. Epub 2016 Dec 20. PMID: 28011011.
10. Intuitive Surgical, company annual report, 2022.
11. Lynn W, Ilcyszyn A, Aguilo R, Agrawal S. Standardised Sleeve Gastrectomy Without Reinforcement. *JLS*. 2018 Jul-Sep;22(3):e2018.00015. doi: 10.4293/JLS.2018.00015. PMID: 30275674; PMCID: PMC6158971.
12. Projections of Supply and Demand for Women's Health Service Providers: 2018-2030, U.S. Department of Health and Human Services Health Resources and Services Administration, 2021.
13. Shanafelt TD, West CP, Sinsky C, Trockel M, Tutty M, Wang H, Carlasare LE, Dyrbye LN. Changes in Burnout and Satisfaction With Work-Life Integration in Physicians and the General US Working Population Between 2011 and 2020. *Mayo Clin Proc*. 2022 Mar;97(3):491-506. doi: 10.1016/j.mayocp.2021.11.021. PMID: 35246286.
14. Vetter MH, Salani R, Williams TE Jr, Ellison C, Satiani B. The Impact of Burnout on the Obstetrics and Gynecology Workforce. *Clin Obstet Gynecol*. 2019 Sep;62(3):444-454. doi: 10.1097/GRF.0000000000000452. PMID: 31008731.