

Value of da Vinci soft-tissue robotic surgery

At Intuitive we believe that minimally invasive care is life-enhancing care. Through ingenuity and intelligent technology, we expand the potential of physicians to heal without constraints.

Today's healthcare landscape

At Intuitive, we focus on the challenges faced by our customers, and health systems overall, as expressed by the Quintuple Aim.

We put patients first, seeking to demonstrate that our products can deliver better outcomes as validated through peer-reviewed evidence¹. We want to work with clinicians and care teams to enhance patient experiences, aiming for quicker recovery with fewer complications and less pain. Our goal is to empower care teams by enhancing their skills, reducing fatigue, and increasing efficiency. We want to help lower the total cost of care, while increasing access to minimally invasive surgery, regardless of when and where patients seek care.

Europe's healthcare systems are under relentless pressure. Across Europe, structural tensions are converging and intensifying:

Access is slowing down: According to a 2023 study, the average waiting time for non-emergency (elective) surgeries in France is about 63 days highlighting growing capacity constraints.²

Workforce shortages are escalating: The World Health Organization (WHO) projects that the European Union could face a shortage of around 4.1 million healthcare workers by 2030, threatening system sustainability.³

Inequities are widening—and are costly: health inequalities represent an estimated €980 billion annual economic burden, reflecting systemic inefficiencies and uneven access to care.⁴



This brief is based on published literature and health economics data.

1. Source: The COMPARE Study: Comparing Perioperative Outcomes of Oncologic Minimally Invasive Laparoscopic, Da Vinci Robotic, and Open Procedures: A Systematic Review and meta-analysis of The Evidence.

Ricciardi R, Seshadri-Kreaden U, Yankovsky A, Dahl D, Auchincloss H, Patel NM, Hebert AE, Wright V. Ann Surg. 2024 Oct 22. doi: 10.1097/SLA.0000000000006572. PMID: 39435549

2. Source: Anna Fleck, "Healthcare: How Long Do Patients Have To Wait?", Statista, 2024.

3. Source: World Health Organization, 2023.

4. Source: "Health Inequalities in Europe", EuroHealthNet, 2019

20.4 million*

Procedures performed to date

31 years

Intuitive was founded in 1995 and launched its first da Vinci surgical system in 2000

50'000+**

Peer-reviewed articles published on da Vinci products and procedures

Portfolio overview

Da Vinci surgical systems provide care teams and their hospitals with the flexibility to address diverse patient needs and help their hospitals' goals, all while providing a consistent customer-centric experience across an entire portfolio of systems. Da Vinci surgical systems are designed to help surgeons perform minimally invasive surgery and offer surgeons high-definition 3D vision, a magnified view, and robotic and computer assistance. Specialized instrumentation, including a miniaturized surgical camera and wristed instruments (i.e., scissors, scalpels, and forceps) are designed to help with precise dissection and reconstruction deep inside the body.

There are three models currently available of the da Vinci multiport surgical system: da Vinci 5, da Vinci Xi, and da Vinci X and one da Vinci Single Port surgical system: da Vinci SP.



Da Vinci systems have three or four*** components

Console: Control center where the surgeon sits to perform the operation.

Tower/Vision cart: Houses processors and intelligently integrated components.

Patient cart: Holds the camera and surgical instruments the surgeon controls from the console.

*Data on file at Intuitive.

**As of December 31, 2025

***Compatibility for a second console, or dual console, enables a second user, often a trainee or co-surgeon, to have the exact same experience as the lead operating surgeon, even simultaneously managing the system arms.

What makes da Vinci systems unique

70+

Indicated procedures for
da Vinci Surgical Systems

Advanced technology

Multiquadrant access

The systems are designed for multiquadrant access, allowing surgeons to perform a variety of robotic-assisted procedures with broad anatomical access, addressing patient variability and integrating advanced da Vinci technology.

Intuitive multiport systems are cleared for clinical indications covering urologic, gynecologic, thoracic, and general surgery.



Complete portfolio of integrated da Vinci robotic instruments and accessories to help total practice robotic programs*

Intuitive offers a wide range of fully wristed robotic instruments (40+) in the market, including integrated stapling and sealing. The instruments are enabled for use from the surgeon console, delivering surgeon autonomy—thereby potentially optimizing OR performance and alleviating staff burden. Instruments, most of which are compatible across da Vinci 5, Xi, and X systems, move like a human hand but with an even greater range of motion. Built-in tremor-filtration technology helps surgeons move each instrument with smooth precision.

With da Vinci 5, we've introduced Force Feedback,** a first-of-its kind technology. Surgeons with varying experience levels delivered up to 43% less force on tissue*** by sensing the push and pull forces exerted on patient tissue. Case Insights uses a unique combination of da Vinci system data, kinematic movement data, and AI video analysis to extract objective insights from surgery and identify opportunities for surgeons to improve patient care.

*Total da Vinci practice refers to the transferable value of robotic-assisted surgery with a da Vinci system across procedures in a surgeon's minimally invasive practice. It is at a surgeon's discretion to determine when a patient is a candidate for minimally invasive surgery and whether robotic-assisted surgery with the da Vinci system is an option.

**The Force Feedback instruments are not CE Marked and cannot be placed on the market nor put into service.

***Based on preclinical data comparing High to Off settings for retraction. Awad MM, Raynor MC, Padmanabhan-Kabana M, Schumacher LY, Blatnik JA. Evaluation of forces applied to tissues during robotic-assisted surgical tasks using a novel force feedback technology. Surg Endosc. 2024;38(10):6193-6202. doi:10.1007/s00464-024-11131-z.

What makes da Vinci systems unique

Professional education

Structured and measured learning

Dual-console capability enables real-time training during live procedures with both surgeons on their own console performing surgical tasks together/ simultaneously. We also offer five technology training pathways for surgeons, robotic coordinators, care team members, and sterile reprocessing members. And our SimNow simulators offer surgeon training in a consequence-free environment.

Our network of trained robotic surgeons is the world's largest, enabling peer-to-peer collaboration and mentoring.

Intuitive's training pathway is accredited by the Royal College of Surgeons of England and validated by IRCAD (the Institute for Research of Cancers of the Digestive System)

Training stats

101'000+

Surgeons trained globally to use da Vinci systems*



Digital solutions: Objective insights, personalized actions

We're working to move surgery forward by giving surgeons the tools to understand, learn, and train toward improved surgical techniques.

My Intuitive+ on da Vinci 5 includes:

- **Case Insights:** Combines surgery video, da Vinci system data, and kinematics data to provide objective insights to help surgeons evaluate their skills.
- **Telepresence:** Enables intraoperative case observation, collaboration, and mentoring.
- **SimNow 2:** Integrated into the da Vinci 5 console, allows surgeons to build proficiency through 35+ exercises across seven clinical specialties.

What makes da Vinci systems unique

Da Vinci multiport safety and reliability stats

(per system, EU data only)

99.9 %*

System uptime rate

99.94 %

Procedure completion rate

95 %**

I&A shipped within one day after valid order is placed.

Program optimization

Patient safety is the foundation of our design, manufacturing, training, and quality assurance processes.

We also provide unique, differentiated capabilities and resources to help clinicians and care teams reliably and repeatably deliver safe and effective care in a resource-efficient way. For example, our OnSite remote diagnostics network uses machine learning to enable real-time system evaluations and hourly proactive reviews, minimizing service disruptions. In addition, remote software updates mean fewer on-site visits, enabling seamless support for optimal system performance.

Support services enable reliability through a variety of resources:

- Customer phone support 24/7
- Customer service
- OnSite real-time monitoring
- Field service
- Digital technical support

Professional services to safeguard your investment

Our professional services bring you the benefits of a decades-long track record in providing tools, consulting, and resources to optimize and grow your da Vinci program.

- **Genesis:** Hands-on consulting and training that provides best practice solutions to streamline your da Vinci program processes for greatest efficiency.
- **Customer Portal:** Online tool that centralizes on-demand data and analytics on system and instrument use, orders, invoices, credits, and returns.
- **Customer Success:** One-to-one support to help you make the most of our products and services, including instrument purchasing, returns and exchanges, and Customer Portal use.
- **Market Access and Custom Analytics (MACA):** Consulting team focused on providing clinical, financial, and operational insights to help grow your da Vinci program.

Financial models for growth and flexibility

Intuitive offers flexible financing options, including leasing, purchasing, and usage-based models that reduce financial barriers to adopting robotic-assisted surgery and empower hospitals to bring care to more patients while managing their financial goals.

*To present date. Data on file at Intuitive.

**Internal Data from Intuitive, orders placed from January 1st 2025 to December 31st 2025

Differentiated clinical outcomes

Da Vinci versus laparoscopic and open surgery: How it stacks up

Meta-analysis¹ of surgical outcomes across:
78 publications
16 European countries
7 oncological surgical procedures

124,389 patients who underwent da Vinci RAS

63,073 patients who underwent laparoscopic surgery or VATS

191,528 patients who underwent open surgery

Years 2010-2022, including:
13 Randomized controlled trials (RCTs)
42 Prospective cohort studies
23 Large database studies

Advancing research and evidence-based care

Intuitive supports the generation of high-quality clinical evidence through sponsored and collaborative research initiatives, working with clinicians, hospitals, and medical/surgical societies to uncover the benefits of Intuitive technologies while maintaining a patients-first mindset and contributing to the body of knowledge about minimally invasive care. We also support independent research through the Intuitive Foundation and conduct pre- and post-market studies to understand patient value, learn from outcomes, and continuously improve our systems.

An example of Intuitive’s commitment to excellence in evidence generation can be found in the highly-respected Annals of Surgery, which this year published results from the COMPARE Study¹ in Europe.

The COMPARE Study is the largest systematic review and meta-analysis of its kind. It evaluated 12 years of data from 78 peer-reviewed publications across 16 countries on seven oncologic procedures performed using da Vinci robotic-assisted surgery, laparoscopic surgery, and open surgery. Scientists from Intuitive and Massachusetts General Hospital authored the study. The meta-analysis demonstrated multiple benefits for da Vinci robotic-assisted surgery as compared to laparoscopy and open surgery. It serves as an example of the quality of scientific data emerging after decades of robotic-assisted surgery.

COMPARE Study results

Conversions 49 % less likely than lap	30-day readmissions 29 % less likely than lap 50 % less likely than open
Blood transfusions 35 % less likely than lap 81 % less likely than open	30-day reoperations ≈ as likely as lap ≈ as likely as open
Length of stay 0.5 days shorter than lap 2 days shorter than open	30-day mortality 39 % less likely than open
30-day complications ≈ comparable to lap	Operative time 50 minutes longer than open

1. The COMPARE Study: Comparing Perioperative Outcomes of Oncologic Minimally Invasive Laparoscopic, Da Vinci Robotic, and Open Procedures: A Systematic Review and meta-analysis of The Evidence.
Ricciardi R, Seshadri-Kreaden U, Yankovsky A, Dahl D, Auchincloss H, Patel NM, Hebert AE, Wright V. Ann Surg. 2024 Oct 22. doi: 10.1097/SLA.0000000000006572. PMID: 39435549

Expand access through customized financing

50 %

Of customers acquire da Vinci technology through a flexible arrangement

22 %

Increase year over year of hospitals around the world that directly partner with Intuitive for flexible financing

At Intuitive, we offer tailored, cost-effective approaches for acquiring and using our surgical systems. Our financing models offer the customization and flexibility you need to bring minimally invasive care to more patients.

In-house financing

We understand your concerns about patient care costs. We share those concerns and are addressing system price through direct-financing options — from leasing to purchase to usage-based models — that align with your needs today and can adapt as your programs grow and change. In-house financing allows us to be flexible and makes it possible for you to acquire da Vinci surgical systems without the cost and unknowns of third-party lending.

Risk sharing

We share the risk in providing ways to acquire and use our technology. As hospitals continue toward value-based purchasing, we're constantly evolving our financing models for access, utilization, and program performance. We want to help you get the most out of your Intuitive technology.

Technology upgrade protection

We make it possible for you to acquire our current generation of equipment through technology upgrade protection.* Most customers financing with us are able to standardize and expand their fleet to our latest generation.

Contact your Intuitive representative or send an email to EUCustomerFinance@intusurg.com for more information.

To learn more about Intuitive and its commitment to continuous innovation please visit [Intuitive.com](https://www.intuitive.com).

To learn more:

- Systems information: [\(Da Vinci 5, Da Vinci Xi, Da Vinci X, Da Vinci SP\)](#)
- [Transforming care through lasting impact](#)
- [Contact us](#)

Da Vinci 5 Surgical System

The da Vinci 5 Surgical System is intended to assist in the accurate control of da Vinci endoscopes and instruments during minimally invasive endoscopic urologic surgical procedures, gynecologic surgical procedures, general laparoscopic surgical procedures and thoracoscopic surgical procedures. The system is indicated for adult and pediatric use. It is intended to be used by trained physicians in an operating room environment.

The da Vinci 5 Surgical System is a class IIb medical device CE marked (CE 2460) under the European Medical Devices Regulation (EU 2017/745), manufactured by Intuitive Surgical, Inc. Refer to Instructions For Use before use.

Da Vinci X & Xi Surgical Systems

The Intuitive Surgical Endoscopic Instrument Control Systems (da Vinci X and da Vinci Xi Surgical Systems) are intended to assist in the accurate control of Intuitive Surgical Endoscopic Instruments during urologic surgical procedures, general laparoscopic surgical procedures, gynecologic laparoscopic surgical procedures, general thoracoscopic surgical procedures, and trans-oral otolaryngology surgical procedures restricted to benign tumors and malignant tumors classified as T1 and T2, and for benign base of tongue resection procedures. The systems are indicated for adult and pediatric use (except for trans-oral otolaryngology surgical procedures). They are intended to be used by trained physicians in an operating room environment.

The da Vinci X and da Vinci Xi Surgical Systems are class IIb medical devices CE marked (CE 2460) under the European Medical Devices Regulation (EU 2017/745), manufactured by Intuitive Surgical, Inc. Refer to Instructions For Use before use.

Da Vinci SP Surgical System

The da Vinci SP Surgical System is intended to assist in the accurate control of the da Vinci SP endoscope and instruments during minimally invasive endoscopic abdominopelvic, thoracoscopic, transoral otolaryngology, transanal colorectal, and breast surgical procedures. The system is indicated for adult use. It is intended to be used by trained physicians in an operating room environment.

The da Vinci SP Surgical System is a class IIb medical device CE marked (CE 2460) under the European Medical Devices Regulation (EU 2017/745), manufactured by Intuitive Surgical, Inc. Refer to Instructions For Use before use.

Legal Notices

Individuals' outcomes may depend on a number of factors, including but not limited to patient characteristics, disease characteristics and/or physician/surgeon experience.

Some products, features or technologies may not be available in all countries. Please contact your local Intuitive representative for product availability in your region.

Refer to the product specific User Manual for indications, contraindications, warnings and other product information.

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