# ISRG gideon lens

## Intuitive Surgical (ISRG) — Gideon Lens

**Report date:** 2026-08-08 **Price anchor:** USD 378.81 per XNAS-listed common share at the 2026-08-07 close **Forecast anchor:** TTM ended 2026-06-30 **Exact horizon:** 5.0 years to 2031-06-30 **Mode:** Production ER2 **Report ID:** `ISRG-PRODUCTION-ER2-20260808T150358+0800`

### Verdict

**Verdict:** PASS

**Scorecard:**

| Gate | Result | Notes |
|---|---|---|
| Management | YELLOW | Strong operator; short CEO tenure and weak buyback efficiency need proof |
| Moat | YELLOW | Ecosystem is real; 2046 test remains exposed to platform competition |
| P/E <= 15 on confident EPS at TTM + 5 calendar years | FAIL | Base USD 215.14 value implies a -43.21% cushion |
| Compounder Score | Audited 65 / 100 | Reject classification; diagnostic quality cannot offset inadequate expected return |
| Business Quality Score | Audited 64 / 80 | Strong franchise, but just below dream-business evidence threshold |
| 20% Return UW Score | Audited 1 / 20 | Current price does not support the 20% stretch hurdle |

**One-line thesis (or reason to pass):** Intuitive Surgical has a strong installed-platform ecosystem and attractive procedure-led reinvestment, but two unresolved qualitative gates and a five-year base net-SGD IRR of only 1.39% make the shares uninvestable at USD 378.81.

This is a valuation-led PASS, not a broken-company call. The reviewed model starts from USD 11.0344B of TTM revenue and USD 3.4512B of statutory income from operations. Base underwriting reaches USD 18.6746B of revenue and USD 6.2560B of operating income by 2031-06-30, with statutory diluted EPS of USD 14.3428. That is a credible operating outcome, but the share price already implies 43.42x TTM statutory diluted EPS. Even a 30x base exit produces only USD 430.28 of terminal value per share and a 2.58% gross USD IRR.

Management and moat also remain YELLOW. David Rosa has deep operating tenure but only about 13 months as CEO at the cutoff, standardized ROIC remained below 15% in FY2023-FY2025, and USD 5.3B of 2022-2025 repurchases produced only modest net share reduction. The moat is supported by training, workflow integration, regulation, instruments, service, and the installed base, but new-room and replacement decisions are increasingly contestable. Hugo, Versius, OTTAVA, MONARCH, and Chinese systems make pure pricing and long-run attach-rate durability less certain. Under the exhaustive ER2 rule, either a failed gate or two YELLOW gates requires PASS.

### Security return underwriting

| Measure | Result | Notes |
|---|---|---|
| Primary valuation method | P/E | One audited equity method used for all scenarios, weighting, reverse-return and net-SGD |
| Gross local-currency bear / base / bull IRR | -11.64% / 2.58% / 12.88% | Five-year annualized shareholder returns in USD |
| Probability-weighted gross local-currency IRR | 2.40% | CAGR of weighted terminal wealth; 25% / 55% / 20% weights |
| Return bridge | USD 378.81 → USD 426.5164 expected terminal wealth | Terminal statutory EPS × scenario exit P/E plus zero distributions; no second net-cash adjustment |

The P/E method is frozen because statutory diluted EPS is fully reconciled and the governed package does not contain complete current and terminal lease-claim paths needed for an EV/NOPAT bridge. Scenario exit P/Es of 24x, 30x and 36x are

deliberately separate from the mechanical P/E 15 entry gate: they reflect progressively stronger durability outcomes while remaining below the current 43.42x TTM P/E. P/E already values the equity claim, so cash and debt are disclosed but not added again. Terminal cash and investments are USD 8.6255B / USD 11.6255B / USD 15.1255B, with zero modeled gross debt. Diluted shares are 361.050M / 355.489M / 350.514M. Intuitive has not paid a common dividend in the governed history, so the bridge uses a clearly labeled zero-distribution diagnostic.

## Bear-case operating and return bridge

| Bear case | Start (2026-06-30) | Horizon (2031-06-30) | CAGR / change | Justification |
|---|---|---|---|---|
| Revenue | USD 11.0344B | USD 15.4243B | 6.93% | Adoption persists, but competition, mix, leases and placements slow |
| Operating margin | 31.28% | 25.00% | -6.28 pp | Tariffs, discounting, launches, R&D and support intensity dominate |
| Operating earnings | USD 3.4512B | USD 3.8561B | 2.24% | Revenue × exact statutory `Income from operations` margin |
| Diluted share count | 359.800M | 361.050M | 0.07% | SBC and constrained buybacks produce slight dilution |
| EPS | USD 8.7237 | USD 8.5016 | -0.51% | Statutory diluted EPS after 24.0% normalized tax |
| Valuation | 43.42x | 24.00x | -19.42x | Competitive erosion and weaker durability compress the equity multiple |
| Share value | USD 378.81 | USD 204.0387 | -11.64% | EPS × P/E; terminal equity value USD 73.6682B |
| Annual dividend | USD 0.00 | USD 0.00 | unavailable | Zero-distribution diagnostic; no historical common dividend |
| Dividend yield | 0.00% | 0.00% | 0.00 pp | No modeled distribution |
| Five-year dividends | — | USD 0.00 | cumulative | No shareholder distribution added |
| Total ending value | USD 378.81 | USD 204.0387 | -11.64% gross local IRR | Share value plus zero distributions; no net-cash double count |

## Base-case operating and return bridge

| Base case | Start (2026-06-30) | Horizon (2031-06-30) | CAGR / change | Justification |
|---|---|---|---|---|
| Revenue | USD 11.0344B | USD 18.6746B | 11.10% | Procedures, utilization, da Vinci 5, Ion and international growth fade gradually |
| Operating margin | 31.28% | 33.50% | +2.22 pp | Gross-margin recovery and SG&A leverage offset sustained R&D |
| Operating earnings | USD 3.4512B | USD 6.2560B | 12.63% | Revenue × exact statutory `Income from operations` margin |
| Diluted share count | 359.800M | 355.489M | -0.24% | Buybacks slightly exceed SBC dilution |
| EPS | USD 8.7237 | USD 14.3428 | 10.46% | Statutory diluted EPS after 22.5% normalized tax |
| Valuation | 43.42x | 30.00x | -13.42x | Strong franchise persists, but premium normalizes materially |
| Share value | USD 378.81 | USD 430.2826 | 2.58% | EPS × P/E; terminal equity value USD 152.9605B |
| Annual dividend | USD 0.00 | USD 0.00 | unavailable | Zero-distribution diagnostic; no historical common dividend |
| Dividend yield | 0.00% | 0.00% | 0.00 pp | No modeled distribution |
| Five-year dividends | — | USD 0.00 | cumulative | No shareholder distribution added |

| Base case | Start (2026-06-30) | Horizon (2031-06-30) | CAGR / change | Justification |
|---|---|---|---|---|
| Total ending value | USD 378.81 | USD 430.2826 | 2.58% gross local IRR | Share value plus zero distributions; no net-cash double count |

### Bull-case operating and return bridge

| Bull case | Start (2026-06-30) | Horizon (2031-06-30) | CAGR / change | Justification |
|---|---|---|---|---|
| Revenue | USD 11.0344B | USD 22.0441B | 14.84% | Category leadership, international expansion and platform adoption stay strong |
| Operating margin | 31.28% | 36.50% | +5.22 pp | Manufacturing maturation, utilization and expense leverage all deliver |
| Operating earnings | USD 3.4512B | USD 8.0461B | 18.45% | Revenue × exact statutory `Income from operations` margin |
| Diluted share count | 359.800M | 350.514M | -0.52% | Strong cash generation supports sustained net repurchases |
| EPS | USD 8.7237 | USD 19.2849 | 17.19% | Statutory diluted EPS after 21.0% normalized tax |
| Valuation | 43.42x | 36.00x | -7.42x | Exceptional execution preserves a premium but not today's multiple |
| Share value | USD 378.81 | USD 694.2562 | 12.88% | EPS × P/E; terminal equity value USD 243.3467B |
| Annual dividend | USD 0.00 | USD 0.00 | unavailable | Zero-distribution diagnostic; no historical common dividend |
| Dividend yield | 0.00% | 0.00% | 0.00 pp | No modeled distribution |
| Five-year dividends | — | USD 0.00 | cumulative | No shareholder distribution added |
| Total ending value | USD 378.81 | USD 694.2562 | 12.88% gross local IRR | Share value plus zero distributions; no net-cash double count |

Probability weighting is performed on terminal wealth, not scenario IRRs. The 25% bear, 55% base and 20% bull terminal values produce expected terminal USD wealth of USD 426.516357 per share; annualizing USD 426.516357 / USD 378.81 over exactly five years gives 2.400682%.

## CIO actionability

| Measure | Result | Notes |
|---|---|---|
| Status | PASS | Base return is below 8%; this is separate from the ER2 verdict |
| Bear / Base / Bull net SGD IRR | -13.60% / 1.39% / 12.72% | Five-year annualized after 0.35% entry/exit costs, zero withholding and FX |
| Probability-weighted net SGD IRR | 1.43% | CAGR of weighted net terminal SGD wealth; 25% / 55% / 20% |
| 10% mandate hurdle | FAIL | Base and probability-weighted cases both miss 10% |
| 15% stretch hurdle | FAIL | Even the bull net-SGD case remains below 15% |
| Downside and portfolio fit | FAIL | Healthcare underweight does not offset -13.60% bear return |
| Proposed sizing ceiling | none | No size proposed; owner approval would be required in any event |

The net-SGD diagnostic uses USD/SGD 1.2779 at entry, scenario terminal rates of 1.1501 / 1.2140 / 1.2779, 0.35% entry cost, 0.35% exit cost and zero withholding because distributions are zero. Probability-weighted net terminal wealth is SGD 521.572020 per share equivalent versus SGD 485.775584 of entry wealth after cost, producing a 1.432171% annualized return. Portfolio context—NAV SGD 2.811M, cash near 0.1%, proposed cash 6%, healthcare underweight by roughly 4.8

percentage points, and no current ISRG holding—constrains fit only. It cannot rescue weak security returns or authorize sizing.

**Trade execution authorized:** NO

**Kill / trigger criteria:**

- BUY trigger: price below USD 215.14 for a positive P/E 15 base cushion, with both Management and Moat upgraded to PASS; the separate 20% base-return price is about USD 172.92.
- PASS trigger: Instruments revenue growth trails da Vinci procedure growth by at least 300 basis points in each of the next two quarters, evidencing monetization leakage.
- PASS trigger: two-quarter annualized operating margin falls below 28% while procedure growth remains above 10%, signaling competition or support costs are overwhelming scale.
- PASS trigger: standardized ROIC remains below 15% through the next two completed fiscal years while buybacks fail to reduce diluted shares by at least 0.5% annually.
- Upgrade conditions: base terminal EPS remains at least USD 14.34, competitive placement evidence stabilizes, pure pricing/attach-rate evidence improves, and the share price supplies a positive P/E 15 cushion.

**Research sizing if actionable:** none. This research has no ranking, sizing, portfolio-mutation or trade authority.

## What matters now

Intuitive's recurring-revenue mix, procedure growth and net-cash balance make the company worth monitoring. The red team nevertheless identifies the 33.5% base operating margin as the most optimistic Stage 5 number because it requires simultaneous gross-margin recovery, SG&A leverage, R&D discipline and contained competitive pressure. A cut in Instruments CAGR from 12% to 10% would reduce terminal EPS by roughly USD 0.72. That does not break the company, but it makes an already thin return bridge worse.

The decision is therefore simple: preserve the company on a research watchlist, but do not confuse an excellent clinical ecosystem with an attractive security at any price. The next useful evidence is monetization relative to procedures, margin behavior through the competitive launch cycle, and disciplined per-share capital allocation. Until those improve and price supplies a real cushion, the governed conclusion remains PASS with no proposed size.

# Intuitive Surgical — Company Primer

**Ticker:** ISRG **Run ID:** `pulse-cio-20260808T150358+0800` **Financial anchor:** fiscal year ended December 31, 2025; TTM ended June 30, 2026 **Information discipline:** every financial or operating figure in this primer comes from `quant_foundation.md` or is a transparent calculation from it. Official Intuitive and SEC materials are used only for qualitative orientation. This primer was prepared independently in parallel using the sealed quantitative foundation plus official Intuitive and SEC sources; the now-completed, reviewed `data_package.md` appears separately in the final report.

## How to read this primer

This appendix separates three kinds of statements:

- **Fact** means a company filing, an official product page, or the sealed quantitative foundation supports the statement.
- **Inference** means a reasonable economic interpretation of those facts, but not an issuer claim.
- **Judgment** means an investor conclusion that must be tested in the later moat, management, scenario, and red-team appendices.

Intuitive Surgical is easy to misread if it is treated as a conventional capital-equipment vendor. The system sale or lease is only the first link in a longer economic chain. A hospital installs a robotic platform, physicians and operating-room teams learn it, procedure capacity and utilization develop, limited-life instruments are consumed, and the platform requires continuing service and software support. The investment question is therefore not simply “how many robots can be sold?” It is whether Intuitive can keep expanding clinically valuable procedures, utilization, and installed capacity while protecting the quality,

reliability, economics, and regulatory standing of the full ecosystem.

## Business overview

**Fact.** Intuitive develops, manufactures, and markets robotic-assisted platforms used in minimally invasive care. Its principal platform is da Vinci, used by surgeons across several specialties; Ion is a flexible, catheter-based robotic platform for minimally invasive lung biopsy. The ecosystem also includes instruments, accessories, learning programs, field service, technical support, software, and digital analytics. The 2025 Form 10-K describes the offering as an integrated set of systems, instruments and accessories, customer learning, support, and digital capabilities. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

The immediate customer is normally a hospital, health system, or other healthcare facility. The user group is broader: surgeons or interventional physicians operate the platform; nurses, operating-room staff, reprocessing teams, and technicians support it; administrators assess capital allocation and program economics; and patients and payers ultimately experience the clinical and economic consequences. Intuitive sells systems through a capital-sales organization and supports procedure adoption through a clinical-sales organization. It uses direct sales in major markets and distributors in other markets. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

The problem being addressed is the trade-off between access and invasiveness. Open surgery can provide access and dexterity but at the cost of a large incision. Conventional laparoscopy reduces incision size but can constrain vision, instrument articulation, ergonomics, and control. Da Vinci places the surgeon at a console and translates hand movements into instrument movements inside the patient, with three-dimensional visualization, wristed instrumentation, tremor filtering, and motion scaling. Ion addresses a different problem: navigating through branching airways to reach small peripheral lung lesions for biopsy. [Da Vinci product overview](https://www.intuitive.com/en-us/products-and-services/da-vinci) and [Ion product overview](https://www.intuitive.com/en-us/products-and-services/ion)

**Inference.** The real product is not the robot alone. It is a workflow and capability system: capital equipment, procedure-specific tools, training, reliability, field support, data, and a clinical installed base. This makes adoption slower and more operationally demanding than buying a stand-alone device, but successful adoption can embed the platform more deeply.

**Judgment.** A durable investment case requires evidence that the ecosystem creates better total value than open surgery, conventional minimally invasive surgery, or competing robotic systems. Technological elegance is insufficient if hospitals cannot earn acceptable returns, clinicians do not broaden use, or outcomes do not justify the workflow and consumable costs.

## Revenue architecture

Intuitive reports one operating and reportable segment. Instruments and accessories, systems, and services are revenue categories within that segment, not separately governed profit centers. The issuer-disclosed performance measure for the segment is **Income from operations**.

### FY2025 revenue composition

| Revenue category | FY2025 revenue (USDm) | Share of total | Plain-language description |
|---|---|---|---|
| Instruments and accessories | 6,018.9 | 59.8% | Limited-life or procedure-related tools and supplies used with da Vinci and Ion |
| Systems | 2,473.7 | 24.6% | System sales and system-leasing revenue recognized under the applicable arrangement |
| Services | 1,572.1 | 15.6% | Support, maintenance, repair, and related platform services |
| **Consolidated revenue** | **10,064.7** | **100.0%** | **One reportable segment** |

Percentages are calculated directly from the sealed FY2025 product revenue table in `quant_foundation.md` and may not sum perfectly before rounding. The segment generated FY2025 operating income of **$2,945.5 million**, equal to a **29.3%** operating margin.

The same architecture remained visible on the latest TTM basis: instruments and accessories were **$6,598.4 million**, systems were **$2,712.0 million**, and services were **$1,724.0 million**, summing exactly to TTM revenue of **$11,034.4 million**. Thus, almost three-fifths of TTM revenue came from instruments and accessories, while systems were roughly one-quarter and

service the balance.

**Fact.** System revenue is not a clean synonym for unit placements. A system may be sold, placed under a sales-type lease, placed under a fixed-payment operating lease, or placed under a usage-based operating lease. The recognition pattern differs by contract. Intuitive also notes that instruments generally expire or wear out through use and need replacement. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

**Inference.** Procedure activity is the core throughput variable. It affects instrument consumption directly and can affect usage-based lease revenue, while installed capacity and platform uptime support service demand. System placements matter because they create capacity, but the value of that capacity depends on utilization.

**Geographic note.** The sealed quantitative foundation does not contain a geographic revenue table, so this primer does not introduce an unsealed percentage split. Qualitatively, the company uses direct organizations in the United States and several major European and Asian markets, a majority-owned joint venture in China, and distributors elsewhere. Geographic exposure matters because regulatory clearance, reimbursement, capital budgets, currency, tendering, and clinical adoption differ by market. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

# Unit economics

## How revenue becomes operating profit

Intuitive does not disclose gross profit by revenue category. Any claim that instruments carry a specific margin or that one platform is more profitable than another would therefore be unsupported in this primer. The correct governed view is consolidated.

| Consolidated bridge | FY2025 (USDm) | Share of revenue |
|---|---|---|
| Revenue | 10,064.7 | 100.0% |
| Cost of revenue | 3,422.4 | 34.0% |
| Gross profit, derived | 6,642.3 | 66.0% |
| Operating expenses | 3,696.8 | 36.7% |
| Income from operations | 2,945.5 | 29.3% |

**Fact.** Cost of revenue covers the manufacturing and delivery economics of systems, instruments, accessories, and services. Operating expenses absorb the continuing investment needed for research and development, commercial support, training infrastructure, regulatory work, and corporate functions. The company maintains field-service and technical-support infrastructure, offers installation, repair, maintenance, technical support, and proactive system-health monitoring, and operates product-specific learning pathways. [Da Vinci service overview](https://www.intuitive.com/en-us/products-and-services/da-vinci/services) and [Da Vinci learning overview](https://www.intuitive.com/en-us/products-and-services/da-vinci/learning)

**Inference by revenue category.** Systems seed the installed base but include substantial manufactured hardware and can create working-capital or lease-asset commitments. Instruments and accessories should be viewed as procedure-linked replenishment economics: the hospital uses a configured set of tools, some reusable for a prescribed life and some sterile or single-use, then replenishes them. Service monetizes the obligation to keep complex clinical equipment available and reliable. Digital offerings can strengthen workflow and data integration, but the sealed quantitative foundation does not isolate digital revenue or margin.

**Fact.** FY2025 operating cash flow was **$3,030.5 million**, capital expenditures were **$539.8 million**, and free cash flow was **$2,490.7 million**. On the TTM base, operating cash flow was **$3,706.4 million**, capital expenditures were **$483.8 million**, and free cash flow was **$3,222.6 million**. TTM free cash flow equaled **102.7%** of attributable net income. However, conversion was much lower in FY2023 and FY2024, so the latest level should not be treated as a permanent steady-state without understanding working capital and investment cycles.

**Inference.** The business is economically capital-light relative to a hospital operator but not asset-light in the software-company sense. It manufactures precision equipment, invests in facilities and tooling, carries inventory, supports global field service, and owns systems placed under operating leases. Lease adoption can trade near-term revenue and cash timing for a potentially longer customer relationship and better alignment between customer cost and procedure use.

**Judgment.** The key unit of analysis is best thought of as lifetime contribution per active, well-utilized installed system—not gross profit on the initial placement. The later model should test procedure growth, utilization, instrument revenue per procedure, service attachment, lease mix, hardware upgrade cadence, and the capital tied up in leased systems. This appendix does not infer category margins that the company does not disclose.

## Products and platforms

### Da Vinci

Da Vinci is a family rather than one device. Current offerings include multiport platforms, a single-port platform, and value-oriented configurations. The surgeon operates at a console; a patient-side cart carries robotic arms; and a vision system provides the operative view. Da Vinci 5 adds force-sensing capability, redesigned controls and ergonomics, upgraded imaging, integrated workflow features, and greater computing capacity. Da Vinci Xi is the broadly used multiport platform, da Vinci X provides a lower-entry configuration, and da Vinci SP is designed for access through a single incision or natural orifice in cleared procedures. [Da Vinci product overview](https://www.intuitive.com/en-us/products-and-services/da-vinci) and [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

The clinical proposition is an integrated combination of visualization, dexterity, precision, stability, and surgeon ergonomics. Importantly, the platform remains surgeon-controlled: software and robotics translate the clinician's movements; the system is not an autonomous surgeon.

### Ion

Ion extends Intuitive from operative treatment into diagnostic intervention. It uses an articulating catheter, real-time shape sensing, planning software, visualization, and biopsy instruments to navigate the lung's airway network and obtain tissue from lesions that may be difficult to reach. Its commercial logic resembles da Vinci—system placement, procedure-linked tools, support, and data—but its care pathway, users, clinical endpoints, and competitive set differ. [Ion product overview](https://www.intuitive.com/en-us/products-and-services/ion) and [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

### Instruments and accessories

The portfolio includes wristed instruments, stapling, energy devices, endoscopes, sterile drapes, vision components, and procedure-specific accessories. Some instruments are reprocessed by hospitals and usable for a defined number of procedures; other items are supplied sterile or used once. Embedded controls govern compatibility and prescribed use. Ion has its own catheter, visualization, biopsy, cleaning, and ancillary tools. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

### Services, learning, and digital

Service includes installation, preventive maintenance, repairs, parts, connectivity, remote updates, technical support, and proactive monitoring. Learning includes role-specific pathways for clinicians and operating-room staff, simulation, case observation, proctoring, and reprocessing education. Digital products connect case data, learning, video, analytics, remote collaboration, and program-management insights. [Da Vinci services](https://www.intuitive.com/en-us/products-and-services/da-vinci/services), [Da Vinci learning](https://www.intuitive.com/en-us/products-and-services/da-vinci/learning), and [Da Vinci software](https://www.intuitive.com/en-us/products-and-services/da-vinci/software)

**Inference.** These layers reduce friction between acquisition and productive use. A robot without trained teams, reliable uptime, compatible tools, and case throughput is stranded capacity. The broader ecosystem is therefore economically relevant even when a particular element is bundled, sold separately, or not disclosed as its own revenue line.

## Customer and buying workflow

**Fact.** The company separates capital selling from clinical account support. The capital team sells systems; the clinical team supports their use in procedures. Customer accounts range from individual hospitals to integrated delivery networks. Intuitive also provides training and field support around installation and ongoing use. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

**Inference.** A typical buying decision is multi-stakeholder. A physician champion may define the clinical need; surgical leadership and operating-room teams assess specialties, case mix, staffing, room configuration, and training; finance and

procurement compare purchase and lease structures; administrators test utilization and total program economics; and technical teams evaluate service and integration. Approval is therefore more like launching a clinical program than ordering a commodity instrument.

After acquisition, workflow execution becomes the gating factor. Teams require technology training, procedure-specific education through qualified clinical channels, setup and docking routines, sterile processing, scheduling, credentialing, and technical support. A second system or an upgrade is more likely when the existing program demonstrates demand, utilization, and operational value.

**Judgment.** The customer relationship is strongest when Intuitive helps a health system turn capital into productive procedure capacity. It is weakest when the platform remains underutilized, training is fragmented, reimbursement is unattractive, or competing workflows are clinically adequate and cheaper.

## Recurring-revenue flywheel and system lease economics

The flywheel begins with an installed platform but is powered by procedures:

- A hospital purchases or leases a system and builds a trained care team.
- Physicians adopt the platform in cleared procedures.
- Each procedure consumes or advances the useful life of instruments and accessories.
- Installed systems require service, maintenance, updates, and support.
- Reliable uptime, training, and digital feedback can support utilization and program expansion.
- Higher utilization or broader procedure adoption can justify incremental capacity or a newer-generation platform.

**Fact.** The TTM mix supports this interpretation: **$6,598.4 million** of instruments and accessories and **$1,724.0 million** of service revenue together exceeded the **$2,712.0 million** system revenue base. These are category revenues, not a contractual definition of recurring revenue, but they show that economics extend well beyond initial hardware.

Operating leases can be fixed-payment or usage-based. A fixed-payment structure spreads revenue over time; a usage-based structure links revenue to procedures. The company says usage-based arrangements reduce initial capital outlay and better match a customer's cost with reimbursement, while exposing Intuitive to utilization variability and the possibility that system cost is not fully recovered. Sales-type leases resemble sales in upfront recognition. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

**Inference.** Leasing is both a commercial tool and a risk-transfer decision. It can lower the adoption barrier, accelerate installed capacity, and align Intuitive with customer utilization. It can also defer revenue, consume capital, and leave Intuitive bearing utilization or residual-value risk. A rising lease mix is not automatically good or bad; the economic result depends on contract structure, procedure ramp, retention, service costs, and lifetime cash recovery.

## Geographic, regulatory, and manufacturing footprint

Intuitive operates globally through direct sales, its China joint venture, and distributors. Regulatory authorization is product-, indication-, and jurisdiction-specific. A clearance for one platform or procedure does not imply approval for every product feature or market. In the United States, the FDA regulates design, clinical evaluation, manufacturing, labeling, promotion, reporting, servicing, and post-market activity. Outside the United States, Intuitive must comply with local authorization and quality regimes, including European medical-device requirements. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

Manufacturing is distributed across company facilities and a joint venture. Systems are manufactured in California, Georgia, and Shanghai; instruments and accessories in California and Mexicali; Ion-related manufacturing occurs in Virginia; and endoscope-related manufacturing occurs in Bulgaria and Germany. The company uses both custom and off-the-shelf components, with some sole- or single-source inputs. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

**Inference.** The distributed footprint brings scale and proximity but creates quality-system, trade, logistics, tariff, and supplier-continuity dependencies. The concentration of instrument production in Mexico is particularly relevant because instruments are the largest revenue category. Regulatory breadth can also compound execution risk: product improvements,

new indications, and software features may progress at different speeds across markets.

**Judgment.** Global runway should be underwritten market by market. Hospital economics, procedure mix, surgeon training, reimbursement, tender practices, local competitors, and approvals are not interchangeable. A global installed-base count can conceal very different utilization and return profiles.

## Competitive landscape and switching costs

Intuitive competes first with treatment alternatives, not just other robots. Those alternatives include open surgery, conventional laparoscopy, radiation, drug therapy, non-robotic diagnostic methods, and deferral of intervention. It also competes with established medtech companies and newer robotic-platform vendors across multiport, single-port, and endoluminal categories. The 2025 filing identifies major companies such as Johnson & Johnson and Medtronic and a broad group of regional and specialist entrants. [SEC 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)

**Fact.** Intuitive's competitive claims emphasize integrated systems, product breadth, reliability, training, service, digital capabilities, and clinical evidence. The official da Vinci page also describes a unified ecosystem spanning multiple platform generations, learning, and services. [Da Vinci product overview](https://www.intuitive.com/en-us/products-and-services/da-vinci)

**Inference.** Switching costs are primarily organizational and clinical rather than contractual. They can include surgeon familiarity, staff training, installed instruments, sterile-processing routines, room design, service relationships, credentialing, data integration, and procurement standardization across a health system. Clinical evidence and peer networks reinforce confidence. These costs can slow replacement but do not make the customer captive: hospitals can operate multiple platforms, direct new specialties to a rival, negotiate pricing, or standardize elsewhere at the next upgrade cycle.

**Judgment.** The strongest moat test is not historical leadership. It is whether a competing platform can offer comparable clinical capability, reliability, instruments, service, training, and total cost while overcoming the customer's transition burden. Price-only competition may have limited effect in complex procedures, but it can be more potent in price-sensitive or standardized procedures.

## Growth drivers and adoption runway

The sealed quantitative foundation records **16%** year-over-year growth in combined worldwide procedures and **19%** revenue growth in Q2 2026. This establishes healthy current demand but does not by itself prove a durable long-run rate.

Potential drivers are:

- **Procedure penetration.** More surgeons and hospitals can adopt robotic assistance within already-cleared procedures, subject to evidence and economics.
- **Utilization.** Existing systems can perform more procedures if trained teams, scheduling, case demand, and room throughput improve.
- **New platform cycles.** Da Vinci 5 can drive first-time adoption, upgrades, and additional capacity when customers value its sensing, ergonomics, workflow, and data capabilities.
- **Specialty breadth.** Growth can come from additional use across general surgery, urology, gynecology, thoracic, and other cleared specialties rather than from a single procedure.
- **Ion pathway development.** Greater utilization in lung biopsy and carefully governed geographic expansion can build a second procedure ecosystem.
- **International adoption.** Markets outside the United States can deepen, though regulation, reimbursement, tenders, and local competition can slow translation.
- **Commercial flexibility.** Purchase, fixed-payment lease, usage-based lease, and trade-in options can reduce adoption friction for different customer needs.
- **Ecosystem productivity.** Training, service, digital insights, and workflow integration can raise the probability that installed capacity becomes active capacity.

**Inference.** The most attractive growth is procedure-led because it drives consumables and can support service and capacity demand. Placement-led growth without utilization risks creating unproductive assets. The later model should therefore avoid treating system placements as an independent end market.

## Capital intensity, R&D, and installed-base service burden

The TTM business generated **$3,222.6 million** of free cash flow after **$483.8 million** of capital expenditures, while holding **$8,625.5 million** of cash and investments and no gross borrowings at June 30, 2026. That balance sheet provides substantial capacity to fund research, facilities, inventory, leases, service infrastructure, and risk management.

However, three burdens should not be minimized. First, new platforms and instruments require sustained research, engineering, clinical, regulatory, and quality investment. Second, precision manufacturing and complex supply chains demand facilities, equipment, inspection, and inventory. Third, a growing installed base expands the field-service obligation: uptime, maintenance, parts, software updates, remote monitoring, and technical response are central to the customer proposition.

**Inference.** Scale can spread software, regulatory, and training investments and improve service density, but only if reliability remains high and product complexity does not increase faster than support efficiency. Operating leases add another capital claim because Intuitive retains ownership of systems and bears more lifetime utilization risk.

**Judgment.** Investors should not capitalize all R&D as if it guarantees future growth, nor treat service spending as discretionary. A meaningful portion sustains regulatory compliance, installed-base reliability, and product competitiveness. The correct question is whether incremental investment extends clinical utility and ecosystem returns faster than it raises support complexity.

## Principal risks and failure modes

- **Clinical-value shortfall.** Outcomes, workflow, or total episode economics may fail to improve enough versus alternatives in a procedure or market. Adoption occurs procedure by procedure, so weakness can be localized before it becomes visible in consolidated growth.
- **Product safety, quality, or recall.** A defect, adverse event, field action, or cybersecurity issue can harm patients, interrupt use, require remediation, and damage trust. In a tightly integrated platform, reputational spillover may exceed the affected component.
- **Regulatory delay or restriction.** New systems, indications, instruments, or software features may be delayed, narrowed, or blocked; existing authorizations can attract additional obligations.
- **Competitive convergence.** Rival platforms may narrow gaps in capability, service, evidence, or instruments. Competitors can price aggressively or enter through specialties and geographies where Intuitive is less embedded.
- **Hospital capital and reimbursement pressure.** Budget constraints, higher financing costs, reimbursement changes, or inadequate procedure economics can delay purchases and suppress utilization.
- **Lease under-utilization.** Usage-based arrangements can lower customer risk while transferring volume and recovery risk to Intuitive. Weak utilization could impair lifetime returns on placed assets.
- **Supply-chain and manufacturing disruption.** Sole- or single-source components, concentrated manufacturing, trade restrictions, tariffs, disasters, or quality failures can interrupt systems and consumables.
- **Instrument reuse or third-party alternatives.** Unauthorized, remanufactured, or competing instruments and independent service can pressure revenue and create safety or reputation risk if performance is poor.
- **Procedure cyclicality and seasonality.** Elective procedures can be deferred by capacity shocks, staffing shortages, patient behavior, deductibles, or macroeconomic stress.
- **R&D productivity and platform complexity.** Investment may not produce clinically meaningful or authorized products. More hardware and software generations can increase manufacturing, training, service, and compatibility burdens.
- **Data, privacy, and AI governance.** Digital tools increase the value of the ecosystem but broaden cybersecurity, privacy, model-governance, and regulatory exposure. AI-enabled features must remain clinically valid and appropriately controlled.

- **Valuation compression.** This appendix does not underwrite valuation, but the sealed close of **$378.81** on August 7, 2026 makes durable growth and return assumptions economically consequential. An excellent business can still produce a poor shareholder result if paid-for expectations are too high.

## Glossary

| Term | Meaning for this company |
|---|---|
| Robotic-assisted surgery | Surgeon-controlled surgery in which a robotic platform translates clinician inputs into instrument movement; not autonomous surgery |
| MIS | Minimally invasive surgery, generally performed through small incisions or natural orifices rather than a large open incision |
| Multiport | A procedure using multiple access ports; da Vinci Xi and da Vinci 5 are principal multiport platforms |
| Single port / SP | A platform designed to deliver instruments and visualization through one access point for cleared procedures |
| Surgeon console | Workstation where the surgeon views the field and controls instruments |
| Patient-side cart | Robotic structure positioned by the patient and carrying instrument arms |
| Wristed instrument | An instrument with articulated joints intended to reproduce or extend hand-like dexterity inside the body |
| Motion scaling | Software translation of a larger hand movement into a smaller instrument movement |
| Tremor filtering | Reduction of unintended hand tremor in translated instrument motion |
| Force feedback | Da Vinci 5 capability intended to let surgeons sense and measure force on tissue |
| Firefly | Fluorescence-imaging capability used to visualize selected anatomy or tissue characteristics |
| Ion | Intuitive's robotic-assisted endoluminal platform for lung biopsy |
| Endoluminal | Operating within the internal passage or lumen of an organ, such as an airway |
| Shape sensing | Technology that estimates the catheter's shape and location during navigation |
| Instruments and accessories | Procedure tools and supporting products used with da Vinci or Ion, including limited-life, reusable, and single-use items |
| Installed base | Systems placed at customer sites and available for use; economic value depends on utilization and contract type |
| Placement | A system delivered under a sale or lease; not necessarily equivalent to revenue recognized in that period |
| Utilization | Procedure activity per installed system over a period |
| Fixed-payment operating lease | Intuitive retains the asset and recognizes lease revenue over time under fixed contractual payments |
| Usage-based operating lease | Intuitive retains the asset and recognizes revenue linked to procedures or use, bearing more utilization risk |
| Sales-type lease | A financing arrangement whose revenue recognition is closer to an upfront sale |
| Service attachment | The extent to which installed systems carry service and support arrangements |
| Reprocessing | Cleaning and sterilizing eligible reusable instruments between procedures |
| IDN | Integrated delivery network, a group of hospitals and care facilities under coordinated ownership or management |
| 510(k) | A U.S. medical-device clearance pathway based on substantial equivalence to a legally marketed predicate |
| PMA | Premarket approval, a more demanding U.S. pathway for certain medical devices |
| EU MDR | European Union Medical Device Regulation governing device certification and market access |

## What the investor must understand before the appendices

Intuitive is a single-segment medical-technology company with a multi-layer economic model. The hardware establishes a clinical platform; procedure growth consumes instruments; the installed base creates service demand; and training, digital tools, and field support help convert installed capacity into productive use. FY2025 revenue was **$10,064.7 million**, led by

instruments and accessories at **59.8%** of total, while consolidated operating margin was **29.3%**. The TTM business produced **$3,222.6 million** of free cash flow and carried **$8,625.5 million** of cash and investments with no gross borrowings.

Those figures establish quality and resilience, not the conclusion. The critical questions for later appendices are whether procedure growth remains clinically and economically justified; whether da Vinci 5 and Ion broaden the runway without diluting returns; whether competition can break ecosystem advantages; whether leasing creates lifetime value rather than merely easing placements; whether service, manufacturing, regulatory, and R&D burdens scale efficiently; and whether the market price already discounts too much of the good outcome.

The investor should preserve four distinctions throughout the report:

- **Placement is not utilization.** Installed capacity only becomes economically valuable through procedures.
- **Revenue category is not reportable segment.** Intuitive discloses one segment and does not provide category margins.
- **Recurring-like is not guaranteed.** Instrument, service, and lease revenue depends on active procedures, uptime, contract terms, and customer economics.
- **Business quality is not stock return.** Security-return underwriting must separately connect operating outcomes to terminal value, distributions, diluted shares, net cash, and exit valuation over the exact five-year horizon ending June 30, 2031.

## Official qualitative sources

- [Intuitive 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)
- [Intuitive company overview](https://www.intuitive.com/en-us/about-us/company)
- [Da Vinci platform overview](https://www.intuitive.com/en-us/products-and-services/da-vinci)
- [Ion platform overview](https://www.intuitive.com/en-us/products-and-services/ion)
- [Da Vinci services and support](https://www.intuitive.com/en-us/products-and-services/da-vinci/services)
- [Da Vinci learning](https://www.intuitive.com/en-us/products-and-services/da-vinci/learning)
- [Da Vinci software](https://www.intuitive.com/en-us/products-and-services/da-vinci/software)

## Quantitative provenance

All financial values and derived percentages in this appendix are controlled by `C:\Users\Admin\OneDrive\GPT\ER 2.0\Intuitive Surgical\quant_foundation.md`, which passed the required eight-check reconciliation. The quote anchor is XNAS:ISRG common stock at **$378.81** on August 7, 2026, with sealed quote packet SHA-256 `55800c98515aec3b71f686260dff9b5f8927713d58d15bf7e114c048a40baddf`. The issuer-disclosed segment bridge uses **Income from operations** and is sealed by SHA-256 `b4b2b67ea0378b32430a371e385d3f0b10487ba53444ea90eeb7f2983638229b`.

# Intuitive Surgical — Management Assessment

**Ticker:** ISRG **Assessment date:** 2026-08-08 **Run ID:** `pulse-cio-20260808T150358+0800` **Management gate: YELLOW**

## Evidence base and framing

This assessment uses the live-fetched [2026 proxy statement](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000023/isrg-20260313.htm), [2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm), [Q2 2026 Form 10-Q](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000058/isrg-20260630.htm), the eight earnings calls and releases from Q3 2024 through Q2 2026, and the official [CEO transition announcement](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-ceo-transition-effective-july-1-2025). Live FMP transcript pulls are archived under `raw/pulse-cio-20260808T150358+0800/m`; no warehouse cache was used as evidence. Financial and

capital-allocation amounts come from the controlling `data_package.md` rather than being re-fetched.

The central distinction is important: Intuitive has an unusually strong long-tenured operating team and a clean governance structure, but David Rosa has been CEO for only thirteen months. His operating record inside Intuitive is long; his independently observable record as final capital allocator is not. The management gate therefore cannot yet receive a decade-following PASS.

## 1. Who is running the company

| Role | Current leader | Tenure and relevant background | Accountability |
|---|---|---|---|
| Chief executive officer | David J. Rosa | CEO since July 1, 2025; joined Intuitive in 1996; President 2023-2025; previously strategy, commercial, scientific, and emerging-procedure leadership | Enterprise strategy, operations, capital allocation, risk, and commercialization |
| Chief financial officer | Jamie E. Samath | CFO since January 2022; joined 2013 as controller; later finance chief and enterprise technology leader; prior Atmel and National Semiconductor finance roles | Planning, reporting, balance sheet, buybacks, technology infrastructure |
| da Vinci platform head | Iman Jeddi, Ph.D. | GM, da Vinci Platforms & Product Operations since May 2025; joined 2013; previously quality, manufacturing, and SP leadership | da Vinci product roadmap and product operations |
| Commercial head | Taylor Patton | Chief Commercial and Marketing Officer since July 1, 2026; almost twenty years at Intuitive; previously led the endoluminal business and Ion global launch | Global commercialization, customer support, access and marketing |
| Manufacturing and supply chain | Mark P. Brosius | EVP since March 2026; joined 2012; led operations and new-product introduction | Manufacturing scale, quality, supply continuity, cost-downs |
| Board leadership | Gary S. Guthart / Craig H. Barratt | Guthart, CEO 2010-June 2025, is Executive Chair; Barratt is Lead Independent Director | Continuity and strategy / independent sessions, agenda and information quality |

Intuitive reports one segment, so there are no statutory segment presidents to assess. Jeddi, Patton and Brosius are the economically material operating heads. The 2026 commercial succession appears orderly: Patton, who built the Ion commercial organization, succeeded Henry Charlton, who moved to global business operations rather than departing abruptly. This is evidence of internal bench strength, although three important promotions in roughly fifteen months also create execution risk.

The board has eleven directors: nine are Nasdaq-independent and two are management, Rosa and Guthart. All standing committees are independent. Barratt can preside without the Executive Chair, approves agendas, and can challenge the quality and timeliness of management information. Five directors were added over the prior six years, mitigating entrenchment. The main structural caution is that the former CEO remains Executive Chair and senior adviser; Barratt's authority is therefore essential, not ceremonial.

## 2. Tenure and track record

Rosa is new in the CEO seat but not a new arrival. His nearly thirty-year history includes founding or leading the clinical engineering and endoluminal groups and senior responsibility for SP, Ion, global commercialization and the product pipeline. Three decisions most attributable to his pre-CEO and CEO leadership are measurable:

- **Building Ion as a second platform.** Ion procedures rose from about 7,400 in 2021 to 144,100 in 2025, while the installed base reached 995 at FY2025 and 1,096 by Q2 2026. The 2025 decline in placements to 195 from 271 was not hidden: management explained that U.S. lung-biopsy penetration was approaching the halfway point and customer focus was shifting from capacity to utilization. That is a credible explanation, but the platform must still prove attractive economics outside the U.S.

- **Launching da Vinci 5 while preserving the installed-base flywheel.** Rosa was President during launch and became CEO during the broad rollout. Da Vinci 5 placements rose from 362 in 2024 to 870 in 2025; 246 of 468 Q2 2026 da Vinci placements were da Vinci 5. Total da Vinci procedures rose 18% in 2025 to 3.153 million, recurring revenue reached 84% of total revenue, and operating income rose from $1.77 billion in 2023 to $2.95 billion in 2025.
- **Expanding direct international distribution.** The March 2026 acquisition of distributor operations in Italy, Spain, Portugal and adjacent territories used $533.1 million of cash. The rationale—closer control of commercialization, training and recurring economics—is coherent with the model. It is too recent to call successful; revenue retention, integration expense and incremental procedure adoption have not yet seasoned.

The less successful or unfinished items are equally relevant. China has remained pressured by lower tenders, local competitors and policy-driven pricing; management has consistently named those problems rather than relabeling them as temporary noise. The 2023-2024 facility buildout drove capex above $1.0 billion in each year and created depreciation deleverage into 2025. Q2 2026 margin improvement suggests the assets are beginning to be absorbed, but the return on those investments still needs a full cycle. Ion's 2025 placement contraction and the distributor acquisition are tests, not completed wins.

Samath has enough tenure to own the balance-sheet record. Reporting quality has been clean and the company has remained debt-free, but capital return has been uneven. He has supported large repurchases without publishing an explicit intrinsic-value threshold. That is financially safe given the net cash balance, yet it is not evidence of exceptional price discipline.

## 3. Capital allocation behavior

| Fiscal year | Capex, $B | R&D, $B | Buybacks, $B | Dividends, $B | M&A cash, $B |
|---|---|---|---|---|---|
| 2021 | 0.354 | 0.671 | 0.000 | 0.000 | 0.009 |
| 2022 | 0.532 | 0.879 | 2.607 | 0.000 | 0.013 |
| 2023 | 1.064 | 0.999 | 0.416 | 0.000 | 0.009 |
| 2024 | 1.111 | 1.145 | 0.000 | 0.000 | 0.001 |
| 2025 | 0.540 | 1.312 | 2.295 | 0.000 | 0.014 |

The strongest evidence is internal reinvestment. R&D grew from $671 million to $1.312 billion and stayed near 13%-14% of revenue while the company launched da Vinci 5, expanded SP and Ion, added digital services, and invested in manufacturing. The physical-investment bulge was aligned with scale needs rather than empire-building. Historical M&A was immaterial until the source-bound $533.1 million distributor transaction in March 2026; there is no serial-acquisition pattern or acquired-goodwill dependency.

The return evidence needs two lenses. FMP standardized ROIC was only 11.89%, 11.99% and 13.71% in FY2023-FY2025, below the framework's persistent 15% automatic screen. The controlling data package's operating calculation—NOPAT divided by average equity plus gross borrowings less cash and short-term investments—produced 21.8%, 20.0% and 21.1%. The difference is largely definition and asset base: Intuitive held $9.03 billion of cash and investments at FY2025 and no official debt. Excluding that surplus reveals strong operating returns; shareholders nevertheless own the low-yielding surplus, so the standardized result cannot be dismissed as a data error. Management has created attractive operating economics but has not fully optimized all capital entrusted to it.

Buybacks are the weakest part of stewardship. Intuitive spent about $5.32 billion in 2022-2025 repurchases, plus $1.51 billion in H1 2026, yet diluted weighted-average shares were 365.8 million in 2021 and 362.7 million in 2025—only a 0.8% net reduction. FY2025 repurchases averaged $477.84 per share; H1 2026 averaged $475.67, with Q2 purchases averaging about $439. These purchases did offset employee issuance and were made without leverage, but the small net share-count benefit relative to dollars spent shows that the program is primarily dilution control, not proven bargain purchasing. No dividend has been paid. This is acceptable, not elite, allocation.

## 4. Compensation alignment

Rosa's reported 2025 compensation was $21.0 million, inflated by the CEO-transition equity award; Samath's was $8.4 million. The ongoing design is 50% RSUs and 50% PSUs for equity, with RSUs vesting over four years and PSUs over about three years. For the 2025 PSU program, two-thirds of value is tied to multi-year da Vinci and Ion procedure-count growth and one-third to adjusted operating margin relative to a medtech peer group. The annual cash plan used 50% adjusted operating

income and 50% strategic objectives in 2025, shifting to 35%/65% in 2026.

The positives are real: multi-year vesting, a capped 125% PSU payout, a Nasdaq-compliant clawback, no hedging or pledging, and ownership requirements of six times salary for the CEO and three times salary for EVPs. Rosa directly owned 228,802 shares at December 31, 2025, worth roughly $130 million at the year-end price, excluding exercisable options and near-term vesting awards. That is genuine skin in the game. Samath directly owned 7,162 shares.

The missing metric is capital efficiency. Neither ROIC, free cash flow per share nor net share-count reduction is a formal PSU metric. Procedure growth is strategically load-bearing because it drives instruments, service and leases, and relative operating margin introduces discipline; nevertheless, executives can earn high payouts while retaining excess cash or repurchasing shares at demanding prices. Companywide share-based compensation rose from $449 million in 2021 to roughly $788 million in 2025, remaining near 8% of revenue despite scale. Repurchases have contained rather than eliminated dilution. Compensation therefore aligns growth and operating execution better than per-share capital allocation.

## 5. Disclosure quality, guidance discipline and tough questions

The last eight calls show better-than-average candor. Management gives procedure growth, placements, installed bases, lease mix, ASP, product and service gross margins when available, tariff basis points, and R&D/capex outlook. It also names China competition, bariatric pressure from GLP-1 drugs, Japan and European capital constraints, tariff exposure, and the utilization risk embedded in usage-based leases.

| Call | Load-bearing question or guidance test | Assessment |
|---|---|---|
| Q3 2024 | China pressure and 2024 procedure range | Raised low end to 16%-17% while saying China pressure would persist; direct |
| Q4 2024 | Why 2025 gross margin would fall | Samath quantified roughly one point of depreciation deleverage and identified product mix and FX; strong |
| Q1 2025 | Tariff shock and mitigations | Quantified a 1.7% revenue impact and said 2025 mitigations would not be significant; candid reset |
| Q2 2025 | Procedure and tariff outlook | Raised procedure range to 15.5%-17% and incorporated tariff cost; numerically useful |
| Q3 2025 | Whether strong procedures reflected pull-forward | Rosa disclosed customer anecdotes, then explicitly said third-party data did not confirm them; unusually balanced |
| Q4 2025 | Lower-cost robotic competition | Explained value segmentation and existing portfolio, but did not quantify price gaps or share risk; partly narrative |
| Q1 2026 | OUS prioritization against low-cost entrants | Described localized pricing, access and direct distribution, but again withheld market-level economics; incomplete |
| Q2 2026 | China tender policy and ACA exposure | Distinguished centralized tenders from VBP and admitted no precise ACA exposure estimate; direct about limits |

Guidance discipline is conservative rather than promotional. The initial 2025 da Vinci procedure outlook of 13%-16% was raised to 15%-17%, then 15.5%-17%, and finally 17%-17.5%; actual growth was about 18%. The initial 2026 range of 13%-15% was raised after Q1 to 13.5%-15.5% and maintained after Q2 with an expectation near the midpoint. Gross-margin guidance moved sharply with tariffs but included explicit basis-point estimates and later improved as refunds and cost-downs became visible. Across the eight-call sample, two quarters contained materially narrative answers on competitive pricing; six provided direct numbers, explicit uncertainty or both. Management does not disclose pure platform revenue, platform profit, price-versus-mix ASP bridges, country revenue, or exact PSU procedure targets. Some omissions are competitively reasonable, but they limit verification of per-platform returns and incentive rigor.

## 6. Strategic coherence

The 2025 10-K states that Intuitive envisions care that is “less invasive and profoundly better” and uses the Quintuple Aim—outcomes, patient and care-team experience, cost and access—as its north star. This has been a consistent multi-decade strategy, not a sequence of fashionable pivots. The investment pattern matches it: R&D supports three platforms and digital tools; capex supports product scale and quality; usage-based leases broaden access; and direct distribution supports training and procedure adoption.

Management also names threats directly. Filings and calls discuss competitive systems, policy-driven China pricing, hospital capex, reimbursement, tariffs, sole-source components and alternative treatments. The five-to-ten-year destination is a broader intervention ecosystem with higher utilization, more procedures, evidence-backed value and recurring instruments/service/digital economics. What remains unproven is whether newer platforms and digital subscriptions earn returns comparable to mature multi-port da Vinci after full manufacturing and commercial costs.

## 7. Governance flags

- **Voting and control:** one class of common stock with equal voting rights; no dual-class or controlling shareholder.
- **Board independence:** nine of eleven directors are independent. The Lead Independent Director structure is credible, but former CEO Guthart's Executive Chair role warrants monitoring for shadow control over Rosa.
- **Related parties:** the proxy discloses a written Audit Committee policy for transactions above $120,000 but identifies no material related-party transaction requiring a separate disclosure table.
- **Controls:** management and PwC concluded internal control over financial reporting was effective at December 31, 2025; no material weakness, restatement or adverse control opinion was identified.
- **Trading:** hedging, pledging, short sales and options are prohibited; SVP-and-above trades generally must use Rule 10b5-1 plans. A bounded filing review found no clustered CEO/CFO discretionary sales signal. The 10-K disclosed one plan by digital/AI head Brian Miller for potential sale of up to 35,344 shares through December 2026.
- **Refreshment:** five new directors were added in six years, but the published corporate governance guidelines available on the IR site carry a 2019 effective date. The proxy and current policies are stronger than that document date implies; document refresh would improve hygiene.

## 8. Peer comparison

| Company / CEO | Capital allocation and communication | Directional rank versus ISRG |
|---|---|---|
| Stryker / Kevin Lobo | Proven operator since 2012 with strong organic execution, but materially more acquisition- and debt-dependent; 2025 included the Inari transaction. Segment disclosure is solid, but platform utilization data are less granular. | Strong steward; ISRG is better on organic reinvestment and balance-sheet risk, Stryker has longer CEO-seat proof |
| Boston Scientific / Mike Mahoney | Strong growth and integration record, but serial M&A—including the announced $14.5 billion Penumbra transaction—raises per-dollar integration and leverage risk. Communicates organic growth clearly. | Comparable operating communicator; ISRG has cleaner capital structure and less acquisition risk |
| Medtronic / Geoff Martha | Scale, dividend discipline and detailed segment reporting are positives, but portfolio reshaping and slower historical organic growth make the strategy less coherent; FY2026 non-GAAP margin declined despite improved growth. | ISRG ranks ahead on innovation intensity, organic growth and strategic continuity |

On five-year stewardship, Intuitive ranks first for organic innovation, balance-sheet resilience and operating disclosure; Stryker is the closest comparator because Lobo has a longer tested allocation record. ISRG does not rank first on every criterion: Boston Scientific and Medtronic provide more statutory segment detail, and all three peers return capital through dividends. Rosa's final ranking remains provisional because most of Intuitive's record was achieved under Guthart.

## 9. Management gate verdict

**YELLOW.** The team is investable: Rosa and Samath are long-tenured, the strategy and reinvestment pattern are coherent, disclosure is candid, governance is clean, and mature operating returns are strong after transparently separating the large cash balance. This is not a PASS yet because Rosa has only thirteen months of CEO authority, the distributor acquisition and newer-platform economics are unseasoned, FMP standardized ROIC remains below 15%, incentives omit ROIC/FCF-per-share, and large buybacks have produced only modest net share reduction. Those are specific unresolved issues, not courtesy caveats.

**Upgrade to PASS if:** (1) through FY2027 Rosa sustains double-digit procedure growth and at least high-teens cash-adjusted operating ROIC while FMP standardized ROIC moves above 15% or management provides a credible surplus-cash plan; (2)

the March 2026 distributor acquisition demonstrates measurable procedure, revenue and margin benefits without control problems; and (3) buybacks or revised incentives produce clear per-share value, with net dilution below 0.5% annually and an explicit capital-efficiency metric.

**Downgrade to FAIL if:** (1) two consecutive years of buybacks above SBC cash cost fail to reduce diluted shares, while repurchases continue without price discipline; (2) da Vinci 5, Ion or SP growth requires persistent margin sacrifice that drives cash-adjusted operating ROIC below 15%; or (3) Rosa/Guthart role ambiguity, evasive competitive disclosure, a control failure, or an acquisition write-down shows that the apparent continuity masks weak independent stewardship.

# Intuitive Surgical — Moat and 2046 Durability

**Ticker:** ISRG **Run ID:** `pulse-cio-20260808T150358+0800` **Assessment date:** August 8, 2026 **2046 test date:** August 8, 2046 **Financial anchor:** TTM ended June 30, 2026; exact statutory performance metric is `Income from operations` for one issuer-disclosed reportable segment.

## Executive finding

Intuitive has a genuine installed-base/procedure moat: regulated equipment embeds trained clinical workflows, procedures consume compatible instruments, and active systems require service. At June 2026, 11,710 da Vinci and 1,096 Ion systems were installed; FY2025 instruments were 59.8% of revenue and issuer-defined recurring revenue was 84%. The gate is **YELLOW** because Hugo, Versius, and newly authorized OTTAVA can take incremental rooms and consumables without forcing wholesale da Vinci removals. ASP and margins are resilient, but pure price, churn, escalators, and minimum commitments are not disclosed.

## 1. Moat taxonomy applied

### Network effects — weak direct, meaningful learning ecosystem

This is not a classic two-sided network. A large user base supports peer teaching, case observation, evidence, procedure norms, and a labor pool familiar with da Vinci. Procedures rose from 1.594 million in FY2021 to 3.153 million in FY2025, making the learning ecosystem credible but not exclusive. Network effects amplify switching costs; they are not the primary moat.

### Switching costs — strong, but concentrated at workflow and replacement decisions

Switching costs sit in surgeon muscle memory, team training, credentialing, sterile processing, room setup, instruments, service, and health-system standardization. The FDA emphasizes model-specific training and hospital credentialing. These costs protect productive programs, but a hospital can dual-source or award a new room or specialty to a rival. The leading indicator is incremental-room and procedure share, not installed-base attrition.

### Scale economies — strong in instruments, service, evidence, and regulatory infrastructure

Scale spreads R&D, quality, regulatory, manufacturing validation, training, and digital investment across a large procedure base and supports field-service density. TTM free cash flow was $3.223 billion, and June 2026 cash and investments were $8.626 billion with no gross borrowings. Complexity, leases, and service obligations absorb part of this advantage. Scale is strongest in da Vinci instruments/service and less proven in Ion.

### Brand and trust — strong, earned by reliability and clinical use rather than consumer preference

Hospitals are buying a high-consequence clinical program, not a logo. Trust is supported by system reliability, trained teams, clinical familiarity, quality controls, field support, and the breadth of procedures already performed. A quality event, cybersecurity failure, recall, or weak clinical outcome can therefore damage the whole ecosystem, not just one product. The moat persists only while trust remains earned. Brand is strongest in da Vinci; Ion's rapid procedure growth is encouraging, but its track record is shorter and it faces a credible incumbent in Johnson & Johnson's MONARCH bronchoscopy platform.

### Regulatory and quality systems — moderate-to-strong barrier, not exclusivity

Each platform, indication, instrument, software feature, and geography requires authorization plus ongoing quality and post-market systems. Da Vinci 5's staged clearances and Ion's AI-navigation clearance show that this is continuous work. These capabilities slow entrants and favor experienced firms, yet recent authorizations for Hugo, Versius, and OTTAVA prove

the barrier is surmountable for capable competitors. Regulatory breadth protects speed and execution quality; it does not confer a permanent license monopoly. Reimbursement is different: hospitals and payers can constrain adoption even where a device is authorized, and China has already imposed pricing limits affecting robotic procedures and instruments.

### Intellectual property — moderate and time-limited

Intuitive reported more than 5,600 patents in force and 2,500 pending worldwide at December 2025. They protect specific mechanisms, instruments, sensing, imaging, software, and know-how—not robotic assistance generally—and expire. System integration, validated production, service, training, and workflows are more durable than IP alone.

### High-trust procurement — strong, but customers have bargaining power

Purchasing involves surgeon champions, surgical leadership, nursing and reprocessing teams, finance, procurement, IT, and administrators. That makes adoption lengthy and favors vendors able to prove reliability, training, service, and total program economics. It also creates a sophisticated buyer capable of tendering, dual-sourcing, and demanding discounts. Johnson & Johnson and Medtronic can bundle broad surgical portfolios, while modular systems can pitch room flexibility and lower capital friction. Procurement protects an incumbent only if utilization and total cost remain compelling.

### Clinical evidence — meaningful but procedure-specific

The strongest evidence of customer acceptance is actual use: FY2025 da Vinci procedures increased 18%, and Q2 2026 procedures rose 15%; Ion procedures rose from 7,400 in FY2021 to 144,100 in FY2025 and grew 36% in Q2 2026. This proves adoption, not universal superiority. The FDA states that RAS devices are safe and effective for certain authorized procedures when used appropriately and with training, while warning that authorization for procedures commonly used in cancer patients is not authorization for cancer prevention or treatment outcomes. Evidence must therefore be underwritten procedure by procedure against open and laparoscopic alternatives.

## 2. Business-driver moat within the one reportable segment

Intuitive discloses one segment, so da Vinci, Ion, instruments, systems, service, leases, and digital tools are business drivers rather than separately governed segments. No product-line operating profit is disclosed.

**Da Vinci systems.** The five-year moat is strong because hospitals buy an integrated clinical program and mature instrument/service catalog. Ten-year durability requires da Vinci 5 to convert compute, force feedback, imaging, and workflow into productivity or clinical consistency. Twenty-year durability is unresolved as rivals offer modular, table-integrated, digitally connected architectures. Earliest break signal: rivals win sustained share of new multi-specialty rooms while da Vinci depends increasingly on discounts or usage-risk transfer.

**Instruments and accessories.** This is the strongest profit-pool candidate. Instruments are compatible with the platform, limited-life or single-use, and consumed as procedures occur. FY2025 revenue was $6.019 billion, and the FY2021–FY2025 four-year CAGR was 18.0%. The moat lasts as long as procedure loyalty and compatibility control remain intact. It weakens if hospitals shift incremental cases to rival robots, payers cap procedure economics, regulators enable broader third-party reprocessing, or competitors reach instrument breadth and reliability. The earliest signal is instrument/accessory revenue growth persistently below procedure growth after adjusting for mix and geography.

**Service footprint.** Global uptime, maintenance, parts, remote monitoring, upgrades, and technical response reinforce procurement trust. Service revenue grew at a 14.4% FY2021–FY2025 four-year CAGR and reached $1.572 billion in FY2025. Density and installed knowledge should endure for at least ten years, but service is attached to active systems rather than independently protected. A rising service-cost burden, falling service gross margin, more independent servicing, or lower renewal/attachment would reveal erosion.

**Ion/endoluminal.** Ion is a promising second ecosystem, with its installed base expanding from 129 in FY2021 to 1,096 by June 2026. Shape sensing, navigation software, biopsy instruments, service, and a growing case base form a smaller version of the da Vinci loop. But Johnson & Johnson's MONARCH is already established and received AI-powered QUEST clearance in 2025. Ion's five-year moat is moderate; ten- and twenty-year durability depend on diagnostic yield, workflow, integration with imaging, and whether biopsy expands toward treatment. Earliest warning: Ion procedure growth slows sharply relative to its installed base or customers prefer a rival imaging/navigation stack.

**Leases, digital, and data.** Operating leases reduce capital friction and can bind economics to utilization, while learning, analytics, video, and remote support can improve program productivity. These layers reinforce the hardware moat but are not yet an independently disclosed profit pool. Usage-based lease revenue also transfers utilization and residual-value risk to

Intuitive. Digital tools are the most replicable layer, and hospitals may demand data portability. The layer becomes durable only if regulated, proprietary case context improves measurable performance; otherwise it becomes bundled software.

The blended company moat is weaker than the instrument/service flywheel alone suggests. Systems can be competitively priced, digital functionality can converge, and Ion has a live rival. Yet the revenue mix is favorable: 84% of FY2025 revenue met the issuer's recurring definition, and the majority came from procedure-linked instruments rather than initial capital sales.

## 3. Margin persistence and operating evidence

The controlled package provides a clean five-year history, not a ten-year series. Product-line operating margins are a true non-disclosure; consolidated `Income from operations` is the only statutory profit basis.

| Metric | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 | Q2 2026 |
|---|---|---|---|---|---|---|
| Revenue, $B | 5.710 | 6.222 | 7.124 | 8.352 | 10.065 | 2.892 |
| Operating margin | 31.9% | 25.3% | 24.8% | 28.1% | 29.3% | 33.6% |
| Consolidated gross margin | 69.3% | 67.4% | 66.4% | 67.5% | 66.0% | 67.8% |
| Product gross margin | 69.5% | 67.3% | 65.7% | 67.2% | 66.3% | 67.9% |
| Service gross margin | 68.6% | 68.2% | 69.8% | 69.0% | 64.6% | 67.2% |

FY2022–FY2023 compression was meaningful: operating margin fell roughly seven points from FY2021, then recovered 4.5 points by FY2025. Gross margin stayed within a relatively narrow 66.0%–69.3% band despite inflation, tariffs, launches, and mix changes. Q2 2026 was stronger, but a single quarter is not a normalized base. The result supports a real moat: the company preserved high gross margins while procedures, placements, competition, and new-platform costs expanded. It does not prove immunity. Service gross margin's FY2025 drop and the absence of product-line operating profit limit attribution.

Da Vinci utilization growth was 17%, 4%, 9%, 2%, and 3% in FY2021–FY2025, so procedures rose through placements and modest recent utilization gains. Purchased-system ASP fell from $1.55 million in FY2021 to $1.42 million in FY2023, then recovered to $1.60 million in FY2025 and $1.59 million in Q2 2026. Product, geography, discounts, trade-ins, currency, and da Vinci 5 mix make this resilience evidence—not a clean price increase.

## 4. AI disruption stress test

**Da Vinci hardware and instruments are chokepoint economics.** A foundation model cannot reproduce regulated mechanical control, sterile instruments, validated imaging, quality manufacturing, or field service with a prompt. AI can improve planning, computer vision, force guidance, anomaly detection, training, and autonomous subtasks, but those features must be integrated and authorized on physical systems. This layer is most protected.

**Ion is also a physical chokepoint, but software competition matters more.** Navigation and targeting can improve rapidly when fused with 3D imaging and AI; MONARCH QUEST already markets this combination. The winner still needs a steerable catheter, biopsy tools, imaging interoperability, clinical evidence, and reliable service. AI accelerates the feature race without eliminating the platform.

**Digital, learning, video, and analytics are most exposed.** Generic case summarization, video indexing, workflow coaching, and training content can be replicated by models with permitted access to the same data. The moat must reside in exclusive case data, validated context, seamless device integration, procurement, and regulatory clearance—not the user interface. Data can reinforce the moat if rights and interoperability allow Intuitive to learn across cases; it can also become a customer-controlled commodity if hospitals insist on open exports.

AI creates a platform-adjacent opportunity as the installed base supplies sensing and workflow context for decision support and partial automation. It also lowers software differentiation for every vendor. The crucial signal is whether AI-enabled features improve measurable outcomes, setup time, instrument use, or throughput and earn paid adoption—not how many features are announced.

## 5. The 2046 test

**Date discipline:** the assessment date is August 8, 2026; the forward test date is exactly August 8, 2046.

**Plausible 2046 company description.** Intuitive sells regulated, connected interventional platforms used for minimally invasive surgery and endoluminal diagnosis/treatment, together with procedure-specific instruments, service, training, and clinically governed software. Hospitals, health systems, and ambulatory surgical centers pay Intuitive through purchases, fixed leases, usage-linked contracts, consumables, and service; insurers and public payers fund the underlying procedures, while clinicians determine use within authorized pathways. The original da Vinci hardware generations have withered, but the multiport and single-port franchises remain as successor architectures. Ion has grown from biopsy navigation into a broader lung intervention pathway if evidence supports it. Digital features are largely bundled unless they demonstrably raise throughput or outcomes. The durable profit pools are limited-life instruments, high-availability service, regulated sensing/control, and usage-linked platform access. Operating margin is directionally lower than the current high-20s/low-30s range—plausibly mid-to-high 20s—because the market is multi-vendor and customers capture more economics, but remains attractive because workflow switching costs, scale, quality systems, field support, and regulated instrument compatibility survive.

**Explicit erosion bear case.** By 2046, open digital standards and interoperable instruments have separated software, instruments, and service from the robot. J&J, Medtronic, CMR, Chinese vendors, and lower-cost assistive systems win incremental rooms; hospitals dual-source and allocate routine procedures to the cheapest adequate platform. AI makes planning, training, video review, and basic control features ubiquitous. Payers reimburse the procedure rather than robotic intensity, and tenders cap instrument prices. Intuitive retains a large legacy base and premium complex cases but loses attach economics; usage-based leases leave it carrying underutilized assets, service density weakens, and operating margin falls toward the low-to-mid teens. This is a material, not remote, outcome—approximately a one-in-three analyst judgment—because serious competitors have now crossed U.S. regulatory gates, although replicating procedure breadth, service, training, and quality at scale remains difficult.

**2046 conclusion: YELLOW.** The company can be described specifically, including payer, customer, surviving profit pools, and directional margins. The unresolved durability issue is whether the ecosystem remains integrated enough to protect instrument and service economics after two replacement cycles in a multi-platform market.

## 6. Competitive threat inventory

The competitive gate is no longer hypothetical: Hugo entered first U.S. commercial use in February 2026 and Medtronic submitted general- and gynecologic-surgery expansions in June; OTTAVA received authorization in July. Clearance does not reproduce utilization, instrument breadth, or service, but it begins the first credible U.S. multi-platform replacement cycle.

| Threat | Mechanism | Business drivers affected | Earliest observable signal | Plausibility |
|---|---|---|---|---|
| Full-platform convergence: Hugo, OTTAVA, Versius | Authorized rivals use modular/table-integrated designs, broad portfolios, and bundled procurement to win new rooms | da Vinci systems; instruments; service; digital | Rival wins at large IDNs; slower placements or deeper discounts despite procedure growth | High |
| Lower-cost/local systems: Moon, Toumai, KangDuo, Edge Medical | Assistive or locally produced systems target ASCs, tenders, routine procedures, and price-sensitive geographies | Systems; leases; instruments; OUS growth | Falling China instrument economics; local tender share rises; ASC placements grow without da Vinci | Medium-high |
| Clinical/reimbursement reset and non-robotic alternatives | Evidence shows limited incremental value in selected procedures; payers or hospitals favor laparoscopy, open surgery, drugs, radiation, or deferral | Procedures; utilization; instruments; leases | Procedure growth decouples from placements; utilization falls; reimbursement or guidelines narrow | Medium |

Ion faces a parallel named threat from J&J's MONARCH QUEST: AI-enabled navigation plus imaging integration can narrow differentiation in lung biopsy. A slower Ion procedure ramp per installed system is the cleanest early warning.

## 7. Pricing-power verification

Pricing power is **moderate, not proven strong**. Purchased-system ASP rose from $1.42 million in FY2023 to $1.60 million in FY2025 and held at $1.59 million in Q2 2026, while placements and procedures continued to grow. Yet management attributes much of the increase to favorable product mix, especially da Vinci 5, and notes offsets from discounts, trade-ins, geography, and currency. No clean price-only realization or churn series is disclosed.

Gross-margin persistence is stronger evidence: consolidated margin remained 66.0%–69.3% across FY2021–FY2025 and reached 67.8% in Q2 2026 despite input costs, tariffs, and launches. The company also states that fixed and usage-based

lease pricing is generally set at a modest premium to purchases for time value and utilization risk. But usage-based arrangements can be cancelled and may fail to recover system cost. No general multi-year escalator, minimum commitment, service-renewal, or customer-retention data is disclosed. The correct conclusion is that ecosystem value and mix have supported price realization so far, while contractual protection is incomplete.

## 8. Moat verdict and observable signals

**Moat gate: YELLOW.** Da Vinci's installed-base/procedure/instrument/service flywheel, workflow switching costs, scale, quality systems, and procurement trust are observable and financially supported. The moat is strongest in procedure-linked instruments and service, moderate in Ion, and weakest in standalone digital features. The gate is held below PASS because the first credible U.S. multi-platform competitive cycle is now underway and pure pricing power is not separately demonstrated.

**2046 test: YELLOW.** A specific high-return 2046 company is plausible, with hospitals and ASCs paying for regulated intervention capacity, consumables, and uptime; however, two replacement cycles create a material risk that interoperability, dual-sourcing, AI feature convergence, and reimbursement discipline erode attach economics.

Observable decision signals:

- **Upgrade to PASS:** through at least one replacement cycle, da Vinci sustains low-double-digit procedure growth, stable or rising utilization, and roughly 66%+ consolidated gross margin while Hugo, OTTAVA, and Versius scale in the U.S., without a material increase in discounting or lease-risk transfer.
- **Upgrade to PASS / downgrade to FAIL:** instrument/accessory revenue per procedure and service gross margin remain stable after mix/FX, or instead decline persistently as rivals win incremental cases, third-party alternatives expand, or hospitals unbundle service and data.
- **Downgrade to FAIL:** large health systems standardize meaningful new specialties on competing platforms, Ion procedure growth materially underperforms installed-base growth, and operating margin trends toward the low 20s without a temporary launch or tariff explanation.

## Sources


- [Intuitive 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm)
- [Intuitive Q2 2026 Form 10-Q](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000058/isrg-20260630.htm)
- [Intuitive Q2 2026 earnings release](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-second-quarter-earnings-6)
- [FDA: Computer-Assisted Surgical Systems](https://www.fda.gov/medical-devices/surgery-devices/computer-assisted-surgical-systems)
- [Medtronic: U.S. FDA clearance of Hugo for urologic procedures, December 2025](https://news.medtronic.com/2025-12-03-Medtronic-announces-FDA-clearance-of-Hugo-TM-robotic-assisted-surgery-system-for-urologic-surgical-procedures)
- [Medtronic: first U.S. commercial Hugo surgery, February 2026](https://news.medtronic.com/2026-02-17-Medtronic-announces-first-surgery-with-Hugo-TM-robotic-assisted-surgery-system-in-the-U-S-performed-at-Cleveland-Clinic)
- [Medtronic: U.S. Hugo indication-expansion submissions, June 2026](https://news.medtronic.com/2026-06-03-Medtronic-submits-510-k-filings-to-expand-Hugo-TM-robotic-assisted-surgery-system-into-general-and-gynecologic-specialties-in-the-United-States)
- [Johnson & Johnson: U.S. FDA De Novo authorization of OTTAVA, July 2026](https://www.jnj.com/media-center/press-releases/johnson-johnson-receives-fda-market-authorization-in-the-u-s-for-its-ottava-robotic-surgical-system)
- [FDA: Versius De Novo record](https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/denovo.cfm?id=DEN230078)
- [CMR Surgical: Versius Plus U.S. 510(k) clearance](https://us.cmrsurgical.com/news/cmr-surgical-secures-510k-clearance-of-its-versius-plus-robotic-surgical-system)

- [Johnson & Johnson: MONARCH QUEST clearance](https://www.jnj.com/media-center/press-releases/johnson-johnson-medtech-announces-clearance-of-monarchtm-quest-for-enhanced-robotic-assisted-bronchoscopy)
- [Moon Surgical company and regulatory milestones](https://moonsurgical.com/)
- [MicroPort MedBot 2025 annual report](https://www.hkexnews.hk/listedco/listconews/sehk/2026/0430/2026043000980.pdf)

Quantitative values in this appendix are governed by `data_package.md` and `quant_foundation.md`. The competitor sources establish regulatory/commercial status and product positioning, not comparative superiority or market share.

# Intuitive Surgical — Consolidated company Segment Deep Dive

**Ticker:** ISRG **Run ID:** `pulse-cio-20260808T150358+0800` **Forecast anchor:** TTM ended 2026-06-30 **Exact five-year horizon:** 2031-06-30 **Currency:** USD **Exact issuer-disclosed profit basis:** `Income from operations` **Statutory bridge:** `issuer_disclosed`; one modeled segment; sealed SHA-256 `b4b2b67ea0378b32430a371e385d3f0b10487ba53444ea90eeb7f2983638229b` **Upstream gates:** `STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING`; `DATA PACKAGE VERIFIED — CLEARED FOR WAVE 2`

## 0. Segment boundary and taxonomy note

Intuitive manages its business on a consolidated basis and has one issuer-disclosed reportable segment, **Consolidated company**. The CODM uses the exact performance measure `Income from operations`. The reporting structure was stable through FY2023–FY2025: no segment realignment, restatement, or taxonomy-changing 8-K was identified. Instruments and accessories, Systems, and Services are dollar-disclosed revenue lines inside the sole segment, not independent reportable segments. Da Vinci and Ion are technology platforms and operating-driver lenses, not separately disclosed revenue or profit segments. This is explicitly **not** the single-segment consolidated fallback; the issuer discloses the segment metric, so every forecast below retains `Income from operations` without reclassification. [data_package §1; §3; §3a]

## 1. What this segment actually is

Intuitive sells an integrated robotic-assisted surgery ecosystem rather than a stand-alone capital device. The customer is generally a hospital, health system, ambulatory surgery center, or distributor. The immediate users are surgeons and operating-room teams; the economic beneficiaries and gatekeepers also include administrators, payers, referring physicians, and patients. The segment monetizes the relationship in three connected ways.

First, **Systems** revenue covers purchased systems, sales-type leases, operating-lease revenue, and lease buyouts. The installed platforms include da Vinci multi-port systems, da Vinci SP, and Ion for robotic-assisted bronchoscopy. A purchase or sales-type lease recognizes more revenue up front. A fixed-payment operating lease recognizes revenue over time, while a usage-based arrangement recognizes revenue as procedures occur. This makes the reported capital line sensitive not only to placements and average selling price, but also to whether a customer buys, leases, trades in an older system, or exercises a buyout option. The system sale is economically important, but it is mainly the entry point to a longer relationship.

Second, **Instruments and accessories** are used during procedures. Revenue therefore scales with the number and mix of da Vinci and Ion procedures, instrument lives, procedure complexity, platform mix, and geography. This line is the largest revenue pool and the clearest expression of the installed-base flywheel: more systems and more trained surgeons create capacity, higher utilization turns capacity into procedures, and each procedure consumes instruments and accessories. Da Vinci 5 can support richer functionality, but the issuer does not disclose a clean revenue premium per case, so the model treats product and procedure mix as a driver rather than inventing a unit price.

Third, **Services** revenue comes from service contracts and support for the installed base. It grows with the number, age, mix, and geographic distribution of systems producing service revenue. The customer proposition is uptime, maintenance, software support, and predictable system operation. Service is therefore less sensitive than purchased-system revenue to any single quarter's capital budget, although it is not immune to placements, retirement cycles, contract pricing, or product transitions.

The go-to-market model combines direct selling and distribution. The March 2026 acquisition of distributors in Italy, Spain, Portugal, Malta, San Marino, and related territories shifted selected markets toward direct distribution. That can deepen

customer contact and retain economics previously paid to distributors, but it also adds commercial infrastructure and execution risk. The broader system is increasingly recurring: recurring revenue—defined by the issuer as instruments and accessories, service, and operating-lease revenue—was 85% of revenue in H1 2026 and $2.469 billion in Q2 2026. [data_package §0a lease history; §5; §9]

Pricing is not a simple list-price model. Purchased-system ASP reflects platform, geography, discounts, trade-ins, specified-price trade-in rights, FX, and timing. The Q2 2026 purchased da Vinci ASP was about $1.59 million versus $1.50 million one year earlier, primarily reflecting favorable product mix including da Vinci 5, partly offset by geography. The model therefore separates placements, ASP/product mix, and lease timing rather than calling the full ASP change price. [data_package §0a gross-margin history; §5]

## 2. Current economics

The TTM ended 2026-06-30 is the required forecast base. Consolidated revenue was **$11.0344 billion**, assembled from the four official quarters and exactly equal to $6.5984 billion of Instruments and accessories, $2.7120 billion of Systems, and $1.7240 billion of Services. `Income from operations` was **$3.4512 billion**, for a **31.28%** margin. The four most recent quarterly revenue growth rates were 22.9%, 18.8%, 23.0%, and 18.5%; operating margins were 30.3%, 30.2%, 30.9%, and 33.6%. The Q2 margin should not be annualized mechanically, but it shows that the model can generate leverage even while R&D remains elevated. [data_package §3a TTM bridge; §5 consolidated and revenue-line rows]

The TTM revenue mix was 59.8% Instruments and accessories, 24.6% Systems, and 15.6% Services. The largest line is directly procedure-linked, while service and operating-lease revenue broaden the recurring base. Q2 2026 recurring revenue represented 85% of revenue. That recurring mix reduces demand volatility relative to a conventional capital-equipment manufacturer, but it does not eliminate economic exposure: procedure deferrals, utilization weakness, hospital finances, and usage-based contracts can move recurring revenue.

Operating activity remains strong but is decelerating from unusually high levels. Da Vinci procedures grew 15% in Q2 2026 after 19%, 17%, and 16% in the prior three quarters. Ion procedures grew 36% after 52%, 44%, and 39%. The da Vinci installed base reached 11,710 systems and the Ion base 1,096 at Q2 2026. Da Vinci placements were 468 in the quarter, including 246 da Vinci 5 systems, while Ion placements were 55. Of the 468 da Vinci placements, 254 were operating leases and 131 were usage-based. [data_package §5 platform KPI table]

The historical flywheel is visible over five years. Da Vinci procedures rose from 1.594 million in FY2021 to 3.153 million in FY2025; Ion procedures rose from 7,400 to 144,100. The da Vinci installed base expanded from 6,730 to 11,106, and Ion from 129 to 995. Utilization growth was much more modest—3% in FY2025 and Q2 2026—so most recent procedure growth came from a combination of installed-base expansion and some utilization improvement rather than a dramatic productivity step. [data_package §0a operating-history and gross-margin tables]

Capital intensity has two faces. Customer operating leases require Intuitive to retain systems and accept utilization and residual-value risk, while manufacturing, facilities, and innovation also consume capital. Capex moved from $354 million in FY2021 to $1.111 billion in FY2024 before declining to $540 million in FY2025. Management's Q3 2025 outlook had expected $625–$675 million, reflecting construction-heavy investment that was expected to moderate. R&D was $1.312 billion, 13.0% of FY2025 revenue, and H1 2026 R&D grew 16%; Q2 R&D alone was $370.6 million, up 18%. R&D remains a real operating expense and is not added back in this appendix. [data_package §6 quote row 1; §7]

At Q2 2026, cash plus investments were $8.6255 billion and official gross borrowings were zero, providing capacity for R&D and product transitions. SBC rose from $449 million in FY2021 to $788 million in FY2025. Diluted weighted-average shares declined from 365.8 million to 362.7 million over those endpoints because repurchases more than offset net issuance, though the path was not monotonic. Segment margin retains SBC as an expense; a later per-share model must address dilution and repurchases. [data_package §7; §8]

## 3. Unit economics

The economic chain starts with placement and training. A hospital commits capital or enters a lease; surgeons and staff learn the workflow; the system gains procedure volume; procedures consume instruments and accessories; and the installed system produces service revenue. The installed base is therefore a stock, placements and retirements are flows, and procedures are the utilization output. A purely capital-sales analysis understates the durability of the business, while a purely recurring-revenue analysis understates the investment and utilization risk that Intuitive takes through leases.

**Instruments and accessories.** This line has the most direct connection to procedure volume. FY2025 revenue grew 18.5% as da Vinci procedures grew about 18% and Ion procedures about 51%, with incremental SP growth and unfavorable procedure mix. The near one-for-one relationship at the consolidated revenue-line level does not prove a constant price per case: da Vinci, SP, and Ion have different consumable profiles; geography and procedure type change mix; instrument-life extensions can reduce revenue per case; and pricing, discounts, and FX matter. The base case consequently allows the line to grow near, but not mechanically equal to, blended procedure activity.

**Systems.** Unit economics depend on placements, purchased-system ASP, product mix, geography, trade-ins, and lease classification. FY2025 Systems revenue grew 25.8%, helped by more da Vinci placements, a lower proportion placed under operating leases, higher lease revenue, and higher ASP. Operating leases generally price at a modest premium to purchases, but usage-based arrangements can be cancelled and may not recover system cost if utilization disappoints. A higher lease mix can suppress near-term reported Systems revenue while increasing future recurring revenue; a later buyout can reverse timing. This asymmetry is why the horizon model does not infer a simple systems-revenue-per-placement formula.

**Services.** Service revenue is driven mainly by the service-producing installed base and product mix. FY2025 growth was 20.3% as the installed base grew and da Vinci 5 mix increased. Service gross margin fell to 64.6% in FY2025 from 69.0% in FY2024, then was 67.2% in Q2 2026. A larger installed base can create scale, but new-platform support, direct-distribution infrastructure, geographic expansion, and transition costs can offset it.

**Gross profit and operating expenses.** GAAP consolidated gross margin declined from 69.3% in FY2021 to 66.0% in FY2025, with a 66.4% trough in FY2023, before reaching 67.8% in Q2 2026. Product gross margin was 66.3% in FY2025 and 67.9% in Q2 2026; service gross margin was 64.6% and 67.2%. Management's latest non-GAAP gross-margin outlook was 68%–69% for FY2026, including an estimated tariff impact equal to 1.0% of revenue. Non-GAAP guidance is not interchangeable with GAAP history, but it identifies the relevant direction and tariff magnitude. [data_package §0a gross-margin table; §6 guidance table]

The difference between gross profit and `Income from operations` funds R&D and SG&A. R&D supports multi-port, SP, Ion, digital products, instruments, imaging, force feedback, regulatory work, and the next generation. SG&A funds field selling, procedure support, training, service infrastructure, and direct distribution. These are not optional overheads: they reinforce the installed-base flywheel and protect the platform's clinical relevance. The base case therefore grants operating leverage slowly, even with double-digit revenue growth. The bull case requires gross-margin normalization and opex productivity, not an arbitrary fixed increment. The bear case assumes tariffs, competition, launch costs, underutilized leased systems, and elevated R&D consume leverage.

Margin can break upward if procedure growth raises high-volume consumables, the installed base spreads service infrastructure, da Vinci 5 manufacturing matures, tariffs ease, direct distribution retains economics, and SG&A grows slower than revenue. It can break downward if new platforms carry adverse manufacturing mix, competing systems force discounts, usage-based customers underutilize systems, instrument lives extend, product recalls or field actions require remediation, direct markets need more support, or tariffs and constrained components raise costs. The substantial majority of instruments and accessories manufactured in Mexicali, endoscope exposure to Germany, China-local subassemblies, rare-earth restrictions, and sole- or single-source suppliers create a real supply-chain sensitivity. [data_package §9]

## 4. Competitive dynamics

The U.S. competitive frame changed materially in 2025–2026. Medtronic's Hugo received U.S. clearance for urology in December 2025, entered commercial use in February 2026, and filed for general and gynecologic expansions in June. J&J received U.S. De Novo authorization for OTTAVA on 2026-07-22 for multiple upper-abdominal general-surgery procedures. These primary-source announcements establish regulatory status, not adoption or share. [Medtronic Hugo commercial case](https://news.medtronic.com/2026-02-17-Medtronic-announces-first-surgery-with-Hugo-TM-robotic-assisted-surgery-system-in-the-U-S-performed-at-Cleveland-Clinic); [Medtronic expansion filings](https://news.medtronic.com/2026-06-03-Medtronic-submits-510-k-filings-to-expand-Hugo-TM-robotic-assisted-surgery-system-into-general-and-gynecologic-specialties-in-the-United-States); [J&J OTTAVA authorization](https://www.jnj.com/media-center/press-releases/johnson-johnson-receives-fda-market-authorization-in-the-u-s-for-its-ottava-robotic-surgical-system)

For Ion, J&J's MONARCH is a direct robotic-assisted bronchoscopy competitor. J&J says MONARCH QUEST received U.S. clearance in March 2025 with AI-enabled navigation, and it continued international expansion in 2026. Again, this establishes the product's existence and regulatory context, not comparative clinical superiority. [J&J MONARCH QUEST clearance](https://www.jnj.com/media-center/press-releases/johnson-johnson-medtech-announces-clearance-of-monarchtm-quest-for-enhanced-robotic-assisted-bronchoscopy)

Competition attacks different layers. A competitor can underprice capital, offer modular arms or a different OR footprint, bundle energy and instruments, integrate its own digital stack, or subsidize entry to win accounts. It can also target a narrow specialty, avoiding the full cost of matching Intuitive's instrument breadth. Hospitals may use competition to negotiate pricing even before a challenger gains substantial utilization. The most sensitive near-term lines are therefore Systems ASP and placements; a slower but more serious effect would be lost procedures, because that weakens consumables and service simultaneously.

Intuitive retains several advantages. Its installed base is already large, surgeon and staff training are embedded, procedure support is extensive, and the instrument and regulatory portfolio spans many procedures. Switching is not impossible, but a hospital must consider retraining, credentialing, case scheduling, service, instruments, clinical evidence, and surgeon preference. A new entrant can place a system, yet utilization is the true test. Intuitive's recurring model also permits flexible operating-lease and usage-based arrangements that lower customer entry barriers.

Pricing power is therefore real but bounded. Intuitive can benefit from differentiated product mix—as the da Vinci 5 contribution to ASP indicates—but it cannot assume permanent list-price growth. Geography, tenders, trade-ins, discounts, and lease terms dilute headline pricing. China adds local competition and tender risk; Europe faces capital pressure; Japan's capital demand can fluctuate. The base case assumes net positive product and service mix but no monopoly pricing. The bear case assumes challengers force discounts and slow replacements. The bull case assumes new systems validate the category faster than they displace Intuitive, while da Vinci 5, SP, Ion, and XiR broaden access.

No current, source-bound global market-share percentage is present in the DR-cleared package, and this appendix does not fabricate one. The defensible claim is operational: 11,710 da Vinci and 1,096 Ion systems were installed at Q2 2026, while 3.153 million da Vinci and 144,100 Ion procedures were performed in FY2025. Those issuer-disclosed stocks and flows are the observable competitive base. [data_package §0a; §5]

## 5. Moat at the segment level

The segment moat is a reinforcing system rather than one patent. The first layer is **workflow embedment**. A robotic program includes surgeons, bedside teams, sterile processing, scheduling, credentialing, service, and case selection. Replacing it changes multiple routines at once. The second layer is **procedure breadth and instrument depth**. A broad portfolio increases the number of cases that can use the installed system, which raises utilization and makes the capital commitment more productive.

The third layer is **training and clinical familiarity**. A surgeon's learned workflow and a team's accumulated experience matter in an operating room where reliability and time are valuable. The fourth is **installed-base economics**. More systems create more service touchpoints and instrument demand, funding more field support and R&D. The fifth is **data and product iteration**. Procedure data, digital workflows, and repeated hardware generations can inform improvements, though the economic value depends on useful products and regulatory permission rather than data volume alone.

The sixth layer is **commercial flexibility**. Purchases, sales-type leases, fixed operating leases, usage-based leases, trade-ins, refurbished XiR systems, and direct distribution allow Intuitive to fit different customer budgets. Management's statement that XiR has a “sizable long-term opportunity” is especially relevant outside large, well-funded U.S. institutions. [data_package §6 verbatim quote row 2; Q4 2025 call dated 2026-01-22, David Rosa] Flexible financing is not free: Intuitive bears more residual-value and utilization risk. But the ability to price and support multiple pathways can protect placements as competitors arrive.

This moat is durable over five years but should not be treated as static over ten. Hugo, OTTAVA, MONARCH, and other regional platforms can weaken capital pricing, win new sites, or establish specialty footholds. Bundled competitors may accept lower system economics to sell instruments or broader OR portfolios. Regulatory clearances narrow barriers one indication at a time. At the same time, a clearance does not instantly reproduce trained surgeons, instrument catalogs, service coverage, or installed utilization. The base case therefore assumes continued leadership with gradual share leakage at the margin; the bear case assumes competitive pressure arrives faster than workflow inertia protects Intuitive; the bull case assumes category expansion and Intuitive's innovation outpace displacement.

The moat is most visible in recurring revenue. Instruments, service, and operating leases represented 85% of H1 2026 revenue. If customers keep using systems, economic value recurs even when purchased-system placements fluctuate. But recurring does not mean contractual certainty: usage-based leases depend on procedures, may be cancelled, and can fail to recover system cost. The correct moat conclusion is “strong, but earned case by case,” not “locked in.”

## 6. Historical growth rates

The following table reproduces the complete five-year dollar history from the DR-cleared package. All revenue lines are issuer-disclosed; none is back-solved. CAGR is the package's FY2021–FY2025 four-year CAGR. Latest YoY is Q2 2026. Each numeric cell points to the exact data-package row family. The historical dollar sources are the issuer's [2021](https://www.sec.gov/Archives/edgar/data/1035267/000103526722000014/isrg-20211231.htm), [2022](https://www.sec.gov/Archives/edgar/data/1035267/000103526723000019/isrg-20221231.htm), [2023](https://www.sec.gov/Archives/edgar/data/1035267/000103526724000021/isrg-20231231.htm), [2024](https://www.sec.gov/Archives/edgar/data/1035267/000103526725000017/isrg-20241231.htm), and [2025](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm) Form 10-Ks, cross-checked to the live FMP annual income-statement and annual product-segmentation endpoints listed in data_package Source and period control. Latest YoY comes from the issuer's [Q2 2026 release dated 2026-07-16](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-second-quarter-earnings-6) and the live FMP quarterly endpoints.

| Product / sub-segment | FY2021 revenue | FY2022 revenue | FY2023 revenue | FY2024 revenue | FY2025 revenue | FY2021–FY2025 CAGR | Latest YoY | Data-package cite |
|---|---|---|---|---|---|---|---|---|
| Consolidated company | $5.710B [§3 total row] | $6.222B [§3 total row] | $7.124B [§3 total row] | $8.352B [§3 total row] | $10.065B [§3 total row] | 15.2% [§4 total row] | 18.5% [§5 Q2 consolidated row] | data_package §3 Consolidated company revenue row; §4 five-year table Total row; §5 Q2 row |
| Instruments and accessories | $3.101B [§4 I&A row] | $3.518B [§4 I&A row] | $4.277B [§4 I&A row] | $5.079B [§4 I&A row] | $6.019B [§4 I&A row] | 18.0% [§4 I&A row] | 17.7% [§5 Q2 I&A row] | data_package §4 five-year disclosed revenue-line history, Instruments and accessories row; §5 Q2 row |
| Systems | $1.693B [§4 Systems row] | $1.680B [§4 Systems row] | $1.680B [§4 Systems row] | $1.966B [§4 Systems row] | $2.474B [§4 Systems row] | 9.9% [§4 Systems row] | 19.2% [§5 Q2 Systems row] | data_package §4 five-year disclosed revenue-line history, Systems row; §5 Q2 row |
| Services | $0.916B [§4 Services row] | $1.024B [§4 Services row] | $1.168B [§4 Services row] | $1.307B [§4 Services row] | $1.572B [§4 Services row] | 14.4% [§4 Services row] | 20.8% [§5 Q2 Services row] | data_package §4 five-year disclosed revenue-line history, Services row; §5 Q2 row |

**Arithmetic integrity.** The three revenue lines sum to consolidated revenue in every year. Annual checks are: FY2022 $3.518B + $1.680B + $1.024B = $6.222B; FY2023 $4.277B + $1.680B + $1.168B = $7.125B versus displayed total $7.124B because line values are rounded to three decimals; FY2024 $5.079B + $1.966B + $1.307B = $8.352B; FY2025 $6.019B + $2.474B + $1.572B = $10.065B. The source's unrounded values tie exactly. [data_package §4]

The YoY arithmetic also passes the 2% tolerance. Instruments and accessories moved approximately 13.4%, 21.6%, 18.8%, and 18.5% over FY2022–FY2025. Systems moved -0.8%, 0.0%, 17.0%, and 25.8%. Services moved 11.8%, 14.1%, 11.9%, and 20.3%. Consolidated revenue moved 9.0%, 14.5%, 17.2%, and 20.5%. Rounding differences are less than 0.1 percentage point. No historical dollar row was estimated or back-solved, so no estimated-row tie-out is required.

The important pattern is not just accelerating total revenue. Instruments tracked procedure adoption; Systems emerged from two flat years as da Vinci 5 placements, lease mix, and ASP improved; Services accelerated with the larger installed base and platform mix. A forecast that applies one common haircut to all three would miss their distinct economic mechanisms.

## 7. Management guidance

The DR-cleared package intentionally bounds verbatim forward quotes to four load-bearing statements. All four relate to the sole segment and are reproduced below exactly as selected upstream.

- **Q3 2025 call, Dan Connolly, VP Investor Relations — capex.** “We expect capital expenditures to range between $625 million and $675 million”. [data_package §6 verbatim quote row 1] The statement anchored a construction-heavy FY2025 investment period. Actual FY2025 capex was $540 million, and the forecast assumes no permanent return to FY2023–FY2024's 13%–15% of revenue without a new capacity cycle.

- **Q4 2025 call, David Rosa, CEO — access.** “we believe there is a sizable long-term opportunity for our da Vinci XiR system”. [data_package §6 verbatim quote row 2] XiR can widen access through a lower-cost refurbished pathway, especially OUS and in ambulatory settings. It supports placement and installed-base growth but could dilute purchased-system ASP relative to richer da Vinci 5 mix; that tradeoff is explicit in the scenarios.

- **Q1 2026 call, Dan Connolly — procedure guidance.** “We are increasing our forecast and now expect full year da Vinci procedure growth within a range of 13.5% to 15.5%.” [data_package §6 verbatim quote row 3] This is the primary near-term operating anchor. It applies to da Vinci procedures, not consolidated revenue or any one revenue line.

- **Q2 2026 call, Dan Connolly — maintained midpoint.** “We are maintaining our forecast to be within this range with an expectation to be closer to the midpoint.” [data_package §6 verbatim quote row 4] After Q2 growth moderated to 15%, management retained the range but emphasized the midpoint. The base case therefore starts near 14.5% procedure growth and decelerates rather than extrapolating Q1 revenue growth.

The guidance progression adds important constraints. FY2026 da Vinci procedure guidance moved from 13%–15% in January to 13.5%–15.5% in April and was maintained nearer midpoint in July. Non-GAAP gross-margin guidance progressed from 67%–68% to 67.5%–68.5% and then 68%–69%; the latest estimate included a 1.0%-of-revenue tariff impact. Non-GAAP opex growth guidance moved from 11%–15% to 11%–14% and then 11%–13%, while management expected R&D to grow faster than SG&A during the rest of 2026. [data_package §6 guidance progression]

Qualitative anchors are equally important. Q2 procedure strength was driven by U.S. general surgery, including after-hours cases, and OUS procedures outside urology. The range embeds risks from U.S. insurance coverage and patient behavior, China tenders and local competition, European capital pressure, Japan capital recovery, and obesity drugs. The model uses these as scenario mechanisms. It does not assume that the 23.0% Q1 revenue increase or 36% Q2 Ion procedure growth can persist unchanged for five years.

## 8. Forward growth assumptions

All forward endpoints are exactly five calendar years from the TTM base: 2026-06-30 to 2031-06-30. The TTM product anchors are $6.5984 billion Instruments and accessories, $2.7120 billion Systems, and $1.7240 billion Services, summing to $11.0344 billion. These are official quarterly sums in the DR-cleared package. [data_package §5; QFR check B reproduced in the verified package]

### 8.1 Base-case growth assumptions

| Product | Historical CAGR | Latest YoY | Management FY+1 guide | Base CAGR TTM→TTM+5y | Justification |
|---|---|---|---|---|---|
| Instruments and accessories | 18.0% FY2021–FY2025 | 17.7% Q2 2026 | Da Vinci procedures 13.5%–15.5%, nearer midpoint | 12.0% | Procedure growth starts near 14% and decelerates as the base expands; Ion, SP, and mix add modestly, while instrument-life and geography limit per-case growth. |
| Systems | 9.9% FY2021–FY2025 | 19.2% Q2 2026 | No line guide; XiR long-term opportunity; procedure guide is indirect | 8.2% | Placements and da Vinci 5 sustain growth, but U.S. competition, leasing, trade-ins, OUS mix, and a maturing replacement wave prevent repetition of FY2025's 25.8%. |
| Services | 14.4% FY2021–FY2025 | 20.8% Q2 2026 | No line guide; installed-base growth is the operating anchor | 12.0% | The larger da Vinci and Ion base plus richer service mix drive growth; pricing and installed-base maturation gradually reduce the rate. |

Base mechanisms are constructive but disciplined. Da Vinci procedure growth steps from 13.5% in year 1 to 12.5%, 11.5%, 10.0%, and 8.5%. This is consistent with management's near-term midpoint and reflects harder comparisons, but still assumes widening OUS and general-surgery adoption. Ion remains much faster than da Vinci initially, but its small disclosed procedure base cannot be translated into a separate dollar forecast. Instruments growth runs slightly above the da Vinci path early because Ion, SP, and procedure mix contribute, then slightly below as pricing and instrument-life effects offset mix.

| Base case, $B | TTM 2026-06-30 | Year 1 | Year 2 | Year 3 | Year 4 | TTM+5y 2031-06-30 |
|---|---|---|---|---|---|---|
| Instruments and accessories | 6.598 | 7.588 | 8.613 | 9.646 | 10.659 | 11.618 |
| Systems | 2.712 | 3.010 | 3.281 | 3.544 | 3.792 | 4.019 |
| Services | 1.724 | 1.965 | 2.221 | 2.487 | 2.761 | 3.037 |
| Consolidated company revenue | 11.034 | 12.564 | 14.115 | 15.677 | 17.212 | 18.675 |

The annual base growth rates are 15.0%, 13.5%, 12.0%, 10.5%, and 9.0% for Instruments; 11.0%, 9.0%, 8.0%, 7.0%, and 6.0% for Systems; and 14.0%, 13.0%, 12.0%, 11.0%, and 10.0% for Services. Consolidated revenue grows 13.9%, 12.3%, 11.1%, 9.8%, and 8.5%. The shape is gradual: no single cliff is used to manufacture conservatism.

## 8.2 Bull-case growth assumptions

| Product | Historical CAGR | Latest YoY | Management FY+1 guide | Bull CAGR TTM→TTM+5y | Justification |
|---|---|---|---|---|---|
| Instruments and accessories | 18.0% FY2021–FY2025 | 17.7% Q2 2026 | Da Vinci procedures 13.5%–15.5%, nearer midpoint | 15.4% | OUS and general surgery broaden faster, Ion and SP sustain mix, and da Vinci 5 functionality supports utilization and consumables without assuming a disclosed price premium. |
| Systems | 9.9% FY2021–FY2025 | 19.2% Q2 2026 | No line guide; XiR long-term opportunity | 13.4% | Da Vinci 5, XiR, SP, Ion, and direct distribution expand placements; category growth outweighs challenger share gains and ASP/product mix stays favorable. |
| Services | 14.4% FY2021–FY2025 | 20.8% Q2 2026 | No line guide | 15.0% | Faster installed-base expansion and da Vinci 5/Ion service content sustain growth, with modest price realization and support scale. |

The bull is not a uniform uplift. Da Vinci procedures grow 16.5%, 15.5%, 14.0%, 13.0%, and 12.0%; Ion and SP adoption add an incremental mix benefit. Systems grow faster than base because placements and ASP/product mix both work, not because the same multiplier is applied to every line. Services compound with a lag as placed systems enter support. Competitive launches expand awareness of robotic surgery, while Intuitive retains enough workflow advantage to monetize category growth.

| Bull case, $B | TTM 2026-06-30 | Year 1 | Year 2 | Year 3 | Year 4 | TTM+5y 2031-06-30 |
|---|---|---|---|---|---|---|
| Instruments and accessories | 6.598 | 7.786 | 9.110 | 10.476 | 11.943 | 13.495 |
| Systems | 2.712 | 3.146 | 3.618 | 4.088 | 4.579 | 5.082 |
| Services | 1.724 | 2.017 | 2.340 | 2.691 | 3.067 | 3.466 |
| Consolidated company revenue | 11.034 | 12.949 | 15.067 | 17.255 | 19.589 | 22.044 |

Annual bull growth is 18%, 17%, 15%, 14%, and 13% for Instruments; 16%, 15%, 13%, 12%, and 11% for Systems; and 17%, 16%, 15%, 14%, and 13% for Services. Consolidated growth is 17.4%, 16.4%, 14.5%, 13.5%, and 12.5%. The terminal rate remains high, so this case requires continued category expansion and execution, not merely one successful launch year.

## 8.3 Bear-case growth assumptions

| Product | Historical CAGR | Latest YoY | Management FY+1 guide | Bear CAGR TTM→TTM+5y | Justification |
|---|---|---|---|---|---|
| Instruments and accessories | 18.0% FY2021–FY2025 | 17.7% Q2 2026 | Da Vinci procedures 13.5%–15.5%, nearer midpoint | 8.2% | Procedures decelerate through insurance, obesity-drug, China, and competition pressures; longer instrument lives and adverse procedure mix limit revenue per case. |
| Systems | 9.9% FY2021–FY2025 | 19.2% Q2 2026 | No line guide; XiR opportunity partly offsets | 2.8% | U.S. challengers, European capital constraints, China tenders, discounts, and more leasing defer capital revenue; XiR access prevents an outright five-year decline. |

| Product | Historical CAGR | Latest YoY | Management FY+1 guide | Bear CAGR TTM→TTM+5y | Justification |
|---|---|---|---|---|---|
| Services | 14.4% FY2021–FY2025 | 20.8% Q2 2026 | No line guide | 8.0% | Service follows a still-growing installed base, but placement weakness, contract mix, support costs, and retirements reduce growth. |

The bear assumes da Vinci procedure growth of 10%, 8%, 7%, 6%, and 5%. It is not a recession-only shock: it is a structural downside in which competing platforms gain placements, hospitals use new alternatives to negotiate, U.S. bariatric pressure persists, China local competition intensifies, and instrument-life changes dampen revenue per procedure. Systems remains positive because recurring leases, replacements, XiR access, and international robotic adoption provide a floor, but its CAGR falls to 2.8%.

| Bear case, $B | TTM 2026-06-30 | Year 1 | Year 2 | Year 3 | Year 4 | TTM+5y 2031-06-30 |
|---|---|---|---|---|---|---|
| Instruments and accessories | 6.598 | 7.324 | 7.983 | 8.622 | 9.225 | 9.779 |
| Systems | 2.712 | 2.820 | 2.877 | 2.934 | 3.022 | 3.113 |
| Services | 1.724 | 1.896 | 2.067 | 2.232 | 2.389 | 2.532 |
| Consolidated company revenue | 11.034 | 12.041 | 12.927 | 13.789 | 14.637 | 15.424 |

Annual bear growth is 11%, 9%, 8%, 7%, and 6% for Instruments; 4%, 2%, 2%, 3%, and 3% for Systems; and 10%, 9%, 8%, 7%, and 6% for Services. Consolidated growth is 9.1%, 7.4%, 6.7%, 6.2%, and 5.4%. This path preserves a growing installed-base franchise but denies the company most capital and margin upside.

## 8.4 Growth attribution and driver transparency

The next table is an analyst attribution of each case's **incremental consolidated revenue**, not issuer disclosure. Categories overlap economically, so allocations are constrained to sum to 100% and are used as a diagnostic rather than a statistical decomposition. “Procedures” captures case-volume growth; “utilization” isolates procedures per installed system; “placements” captures capacity additions; “ASP/product mix” captures da Vinci 5, XiR, geography, trade-ins, FX, and price together; “lease mix” captures timing and usage-based recognition; “service/base” captures support on the installed base.

| Driver share of incremental revenue | Bear | Base | Bull | Mechanism |
|---|---|---|---|---|
| Procedure-volume expansion | 45% | 42% | 39% | Consumables grow with da Vinci, SP, and Ion cases; share falls in bull because capital also accelerates. |
| Utilization improvement | 10% | 10% | 9% | Procedures per system improve modestly; no return to FY2021's 17% utilization jump is assumed. |
| Net placements and capacity | 6% | 14% | 18% | New da Vinci, SP, Ion, and XiR systems support Systems and later service revenue. |
| ASP and product/geography mix | 0% | 8% | 10% | Bear discounts offset richer platforms; base and bull retain positive da Vinci 5 mix without treating ASP as pure price. |
| Operating-lease and usage-based mix | 15% | 10% | 9% | Leases defer some capital revenue but add recurring recognition as utilization develops. |
| Installed-base service growth | 20% | 12% | 10% | Service contracts follow the active base; its share is largest when capital growth is weak. |
| Geography, digital, and other | 4% | 4% | 5% | Direct distribution and workflow products add modestly; no separate digital dollars are invented. |
| Total attributed incremental revenue | 100% | 100% | 100% | Constrained analytical attribution. |

In dollar terms, the bear adds $4.390 billion of revenue: $3.181 billion, or 72.5%, comes from Instruments; $0.401 billion, or 9.1%, from Systems; and $0.808 billion, or 18.4%, from Services. The base adds $7.640 billion: $5.020 billion, or 65.7%, from Instruments; $1.307 billion, or 17.1%, from Systems; and $1.313 billion, or 17.2%, from Services. The bull adds $11.010 billion: $6.897 billion, or 62.6%, from Instruments; $2.370 billion, or 21.5%, from Systems; and $1.742 billion, or 15.8%, from Services. These shares demonstrate that each case changes the mechanism, not merely the scale.

## 9. Forward `Income from operations` margin assumptions

The exact segment metric is `Income from operations`. The TTM anchor is $3.4512 billion on $11.0344 billion of revenue, or 31.28%. Product-level operating profit and operating margins are a true non-disclosure; this appendix does **not** invent them. Instead, it uses disclosed combined product and service gross-margin evidence to construct a consolidated segment margin, then deducts consolidated R&D and SG&A/other operating expenses. [data_package §3a; §10 gap rows]

| Margin bridge at TTM+5y | Bear | Base | Bull | Evidence and mechanism |
|---|---|---|---|---|
| Combined product gross margin | 63.8% | 68.8% | 71.2% | FY2025 66.3%, Q2 2026 67.9%; tariffs, launch mix, pricing, and manufacturing maturity drive scenarios. |
| Service gross margin | 65.0% | 69.0% | 70.2% | FY2025 64.6%, Q2 2026 67.2%; support mix and scale determine recovery. |
| Revenue-weighted consolidated gross margin | 64.0% | 68.8% | 71.0% | Weighted by forecast combined product and Services revenue; no I&A/System margin split is invented. |
| R&D as percentage of revenue | 15.0% | 13.2% | 12.7% | FY2025 13.0%; bear retains heavy remediation and platform spend; bull gets revenue leverage without cutting absolute innovation. |
| SG&A and other operating expense as percentage of revenue | 24.0% | 22.1% | 21.8% | Field support and direct distribution remain necessary; scale varies by case. |
| `Income from operations` margin | 25.0% | 33.5% | 36.5% | Exact issuer-disclosed segment metric. |

The base margin rises 222 basis points from 31.28% to 33.5%. The mechanisms are a healthier product and service gross margin after manufacturing scale and tariff absorption, plus SG&A leverage as the revenue base expands. R&D remains 13.2% of revenue—slightly above FY2025's 13.0%—because absolute R&D grows substantially. The case therefore does not create profit by starving the product roadmap. Direct-distribution investments and field support limit leverage.

The bull margin rises 522 basis points to 36.5%. That requires several things to work together: da Vinci 5 manufacturing matures, service margin exceeds its FY2025 level, tariffs are mitigated, utilization supports lease economics, discounts remain contained, and both R&D and SG&A grow slower than revenue in percentage terms. Absolute spending still grows because revenue roughly doubles. The endpoint is deliberately below the notion that every incremental dollar falls through at the gross margin.

The bear margin falls 628 basis points to 25.0%. Product gross margin drops below FY2025 as tariffs, component pressure, launch costs, discounts, adverse geography, and underutilized operating leases combine. R&D rises to 15.0% of revenue because regulatory, competitive, and product-response programs do not scale down with placements. SG&A and other operating expense rise to 24.0% because direct markets, service infrastructure, and competitive support remain costly. The model does not assume a collapse in demand; it assumes operating diseconomics as growth slows.

| Case and exact metric | TTM margin | Year 1 | Year 2 | Year 3 | Year 4 | TTM+5y margin |
|---|---|---|---|---|---|---|
| Bear — `Income from operations` | 31.28% | 30.0% | 28.5% | 27.0% | 26.0% | 25.0% |
| Base — `Income from operations` | 31.28% | 31.8% | 32.2% | 32.7% | 33.2% | 33.5% |
| Bull — `Income from operations` | 31.28% | 32.2% | 33.2% | 34.4% | 35.6% | 36.5% |

| Income from operations, $B | TTM 2026-06-30 | Year 1 | Year 2 | Year 3 | Year 4 | TTM+5y 2031-06-30 |
|---|---|---|---|---|---|---|
| Bear | 3.451 | 3.612 | 3.684 | 3.723 | 3.805 | 3.856 |
| Base | 3.451 | 3.995 | 4.545 | 5.126 | 5.714 | 6.256 |
| Bull | 3.451 | 4.170 | 5.002 | 5.936 | 6.974 | 8.046 |

SBC remains inside operating expenses. The rise from $449 million in FY2021 to $788 million in FY2025 is relevant both to margin and eventual diluted-share outcomes. The operating forecast assumes SBC expense is not removed. Repurchases and diluted shares belong in the combined per-share model, not in `Income from operations`; the segment appendix therefore gives no ranking, sizing, trade, or repurchase recommendation.

## 10. Segment rollup

The rollup is bottom-up from the three dollar-disclosed revenue lines. Product-level operating margins are not disclosed, so the revenue-weighted margin construction occurs through combined product/service gross profit and consolidated operating expenses in Section 9. Each total below equals the sum of Instruments and accessories, Systems, and Services to rounding. Profit equals total revenue multiplied by the displayed `Income from operations` margin.

| Case | Instruments and accessories, $B | Systems, $B | Services, $B | Segment TTM+5y revenue, $B | Exact profit metric | Segment margin | Segment profit, $B |
|---|---|---|---|---|---|---|---|
| Bear | 9.779 | 3.113 | 2.532 | 15.424 | Income from operations | 25.0% | 3.856 |
| Base | 11.618 | 4.019 | 3.037 | 18.675 | Income from operations | 33.5% | 6.256 |
| Bull | 13.495 | 5.082 | 3.466 | 22.044 | Income from operations | 36.5% | 8.046 |

The displayed product rows reconcile within 0.01% to the unrounded model. Bear totals $15.424B; base totals $18.675B; bull totals $22.044B. Component sums can differ by $1 million because each line is displayed to three decimals; profit uses unrounded revenue and the exact displayed margin.

Probabilities are **25% bear, 55% base, and 20% bull**. They are deliberately non-uniform. Base has the highest weight because the installed base, recurring mix, and management's near-term procedure guide support continued double-digit growth, but the bear has a larger weight than the bull because U.S. competitors now have regulatory footholds and the current valuation is irrelevant to operational probability. These are operating-scenario probabilities only, not return probabilities and not a recommendation.

## 11. Key risks and wildcards

- **Competitive system entries — bear/base.** Hugo's U.S. urology launch and OTTAVA's upper-abdominal authorization make capital competition more tangible. The first effect may be discounts and placement friction; the larger long-term effect would be lost procedures, consumables, and service. Base assumes gradual leakage; bear assumes faster multi-specialty expansion and bundling.

- **Procedure adoption and utilization — all cases.** A growing installed base only creates value if procedures grow. Insurance coverage, patient behavior, scheduling, surgeon capacity, obesity drugs, and clinical preferences can change procedure rates. Bull requires sustained general-surgery and OUS expansion; bear assumes the midpoint guide is a near-term peak.

- **China and geography — bear/base.** China tenders, local competition, regulatory timing, and pricing can pressure placements and mix. European capital budgets and Japan's recovery are volatile. OUS growth can add procedures while diluting ASP, so geography is not uniformly positive or negative.

- **Product and regulatory execution — all cases.** New indications, instrument-life changes, da Vinci 5 manufacturing, Ion software, SP, and XiR determine adoption and economics. Delayed clearance, recall, field action, cybersecurity issue, or unfavorable clinical evidence could slow placements and raise R&D/service costs. Bull assumes the pipeline widens addressable procedures; bear assumes remediation consumes resources.

- **Tariffs and supply chain — bear.** Mexicali instrument production, German endoscopes, China subassemblies, rare-earth restrictions, and sole-source components create concentration. Management's latest outlook embedded tariff costs equal to about 1% of revenue. Refunds can reverse, and future policy is unknowable. Bear assumes persistent costs and less ability to price through them.

- **Lease and residual-value risk — bear/base.** Operating and usage-based leases support access and recurring revenue, but customers can underutilize or cancel some arrangements, and Intuitive may fail to recover system cost. A higher lease mix also defers reported Systems revenue. Bull requires utilization to make the retained economics attractive.

- **R&D intensity and SBC — all cases.** R&D is necessary to defend the ecosystem, and management expects it to outgrow SG&A near term. SBC is economically real and affects both operating expense and diluted shares. Base keeps R&D near 13% of revenue; bear assumes a higher burden; bull assumes leverage through revenue, not underinvestment.

- **ASP interpretation — all cases.** The disclosed $1.59 million Q2 ASP is not price alone. Product, geography, discounts, trade-ins, FX, and specified-price rights all contribute. The bull needs favorable mix; the bear assumes discounts and XiR/OUS mix offset da Vinci 5. No scenario extrapolates the latest ASP as a clean pricing series.

- **Service economics — bear/base.** Service gross margin fell materially in FY2025 before recovering in Q2 2026. A larger installed base can spread infrastructure, but new-platform complexity, field staffing, and direct distribution can raise cost. The margin bridge explicitly avoids assigning fictional operating margins to Services.

- **Capital allocation and dilution — downstream wildcard.** Intuitive has substantial net cash and has repurchased shares, but H1 2026 repurchases occurred at an average $475.67, above the Stage 0 quote. This appendix does not judge repurchase value or forecast diluted shares. The synthesis stage must reconcile SBC, issuance, and buybacks rather than assuming share count always declines.

## Summary

| Case | Segment TTM+5y Revenue | Exact profit metric | Segment TTM+5y Profit Margin | Segment TTM+5y Profit | Probability |
|---|---|---|---|---|---|
| Bear | $15.424B | `Income from operations` | 25.0% | $3.856B | 25% |
| Base | $18.675B | `Income from operations` | 33.5% | $6.256B | 55% |
| Bull | $22.044B | `Income from operations` | 36.5% | $8.046B | 20% |

Intuitive's sole segment can still compound at a double-digit rate because procedures, installed-base growth, service, and leases reinforce one another. The hinge is how much category growth Intuitive retains as U.S. competition becomes commercial and how much converts to `Income from operations` after tariffs, R&D, support, and product transitions. Base earns 11.1% revenue CAGR and a 33.5% margin; bear shows that positive revenue growth can yield limited profit compounding; bull requires category leadership and manufacturing leverage.

### Data gaps retained exactly

- [DATA GAP: The issuer does not separately disclose da Vinci versus Ion revenue dollars or profit. No platform-dollar forecast is presented.]
- [DATA GAP: Product-line operating margins for Instruments and accessories, Systems, and Services are not disclosed. Consolidated `Income from operations` is constructed from disclosed product/service gross-margin evidence and consolidated operating expenses.]
- [DATA GAP: Quarterly absolute procedure volumes are not consistently disclosed in every release. The model uses official annual levels and disclosed quarterly growth rates.]

- [DATA GAP: Country-by-country revenue is not fully disclosed. U.S./OUS mix and country procedure commentary are used without inventing country revenue.]
- [DATA GAP: A pure price-versus-mix ASP bridge is not disclosed. ASP is treated as combined product, geography, pricing, trade-in, and FX evidence.]

# Intuitive Surgical — Synthesis (Combined Earnings Model)

**Ticker:** ISRG **Run ID:** `pulse-cio-20260808T150358+0800` **Mode:** Production ER2 **Model purpose:** mechanical consolidation of the reviewed operating cases into statutory net income, quote-unit EPS, and the P/E 15 entry-price test. This appendix has no trade, ranking, sizing, or portfolio authority.

The synthesis is built only from the DR-cleared `data_package.md`, the byte-sealed `statutory_bridge.json` and `quote_packet.json`, the reviewed `appendix_B_consolidated_company.md`, and the completed management and moat appendices. No price was re-fetched. No accounting line was reclassified. No segment-profit metric was renamed. Intuitive reports one issuer-disclosed segment, whose exact modeled profit metric is `Income from operations`; the single-segment fallback is ineligible. There are no corporate/unallocated adjustments and no operating bridge adjustments. All forecast calculations start from TTM ended 2026-06-30 and run exactly five calendar years to 2031-06-30.

## 1. Anchors and sealed-input control

- Today: 2026-08-08.
- Fiscal year end: December 31.
- Latest completed fiscal year: FY2025, used only for historical reconciliation.
- TTM anchor: 2026-06-30, comprising Q3 2025, Q4 2025, Q1 2026, and Q2 2026.
- Horizon: 2031-06-30, exactly 5.0 calendar years after the TTM anchor. No row compounds from FY2025 and no six-year span is used.
- Listing/security: `XNAS:ISRG`, one common share of Common Stock, par value $0.001 per share. Instrument type is common share. The quoted and financial-statement share classes are identical.
- Valuation price: USD 378.81 per listed common share, raw exchange close for the 2026-08-07 completed session. Raw evidence SHA-256 is `ca5224e91774929e1c46148273d1f07573bf298b82560101df198b918cd8f9bd`; QFR-sealed packet SHA-256 is `55800c98515aec3b71f686260dff9b5f8927713d58d15bf7e114c048a40baddf`; actionability expiry is 2026-08-09T15:18:16+08:00.
- Quote validation: the strict validator was run at 2026-08-08T16:41:35+08:00 and returned `QUOTE_PACKET_VALID` with the exact expected packet hash. The packet was unexpired at validation time.
- Currency bridge: reporting currency USD; quote currency USD; `FX_QUOTE_PER_REPORTING = 1.0`, dated 2026-08-07 under `IDENTITY_SAME_CURRENCY`.
- Split bridge: financial-statement diluted shares 357.3M at 2026-06-30 × split factor 1.0 = quote-basis diluted financial shares 357.3M. The quote packet states `NO_INTERVENING_SPLIT` through 2026-08-07; the split-source SHA-256 is `6f4877cf01051c68225980108e8873d6736c945f2064b550445a5aefd6f33ab4`.
- Listed-unit bridge: depositary ratio 1.0 × share-class factor 1.0 = 1.0 financial share per listed unit. Therefore 357.3M quote-basis financial shares ÷ 1.0 = 357.3M listed-unit equivalents.
- Statutory bridge: SHA-256 `b4b2b67ea0378b32430a371e385d3f0b10487ba53444ea90eeb7f2983638229b`. The validator returned `STATUTORY_BRIDGE_VALID` with exact hash equality. `gate_manifest.json` records the DR clearance `STATUTORY BRIDGE VERIFIED — CLEARED FOR FORECASTING` and the reviewed segment artifact hash `53d5d154c2cee98354049f149bf3952973fd49f5a9b8cc4b910224117f0eb0de`.

The quote-basis share anchor is intentionally the packet's 357.3M latest-quarter diluted shares, not the 359.8M TTM weighted-average denominator. The latter is retained only for the TTM statutory EPS cross-check. Current TTM EPS is USD

3.1388B ÷ 359.8M = USD 8.7237, which implies a current P/E of 43.42× at USD 378.81. That current P/E is descriptive; the required entry gate below tests horizon EPS at 15× against the same packet price.

## 2. Segment-level forward assumptions

The table reproduces the only reviewed segment row from `appendix_B_consolidated_company.md` Sections 8–10. The full-precision terminal revenue and operating-income values are those supplied by the orchestrator from the reviewed rollup; displayed values are rounded only for readability.

| Segment | Exact profit metric | TTM revenue, USD B | Bear TTM+5y revenue, USD B | Base TTM+5y revenue, USD B | Bull TTM+5y revenue, USD B | Bear profit margin | Base profit margin | Bull profit margin |
|---|---|---|---|---|---|---|---|---|
| Consolidated company | Income from operations | 11.0344 | 15.424329 | 18.674594 | 22.044082 | 25.0% | 33.5% | 36.5% |

Source: reviewed `appendix_B_consolidated_company.md` Sections 8.1–8.3, 9, and 10. The terminal revenue is the sum of the three issuer-disclosed revenue lines—Instruments and accessories, Systems, and Services—inside the sole reportable segment. Product operating margins are a true non-disclosure; the appendix does not invent them. Instead, the reviewed operating-margin bridge combines disclosed product and service gross-margin evidence and then deducts consolidated R&D and SG&A/other operating expense. This produces the exact issuer metric `Income from operations`.

The operating probabilities remain 25% bear, 55% base, and 20% bull. Base receives the highest weight because procedure growth, the installed base, and 85% recurring revenue support continued growth. Bear receives more weight than bull because competitors have obtained regulatory footholds, capital budgets and China remain risks, and the management and moat assessments are YELLOW rather than green. These probabilities describe operating paths, not a portfolio recommendation.

## 3. Combined revenue build by case

There is one modeled segment and no consolidation elimination. Consequently, the segment sum and combined revenue are identical in every case. The CAGR is calculated as `(terminal revenue ÷ USD 11.0344B)^(1/5) − 1`, using exactly five calendar years.

| Line | Bear | Base | Bull |
|---|---|---|---|
| Sum of segment TTM+5y revenue, USD B | 15.424329 | 18.674594 | 22.044082 |
| Corporate eliminations | 0.000000 | 0.000000 | 0.000000 |
| **Combined TTM+5y revenue, USD B** | **15.424329** | **18.674594** | **22.044082** |
| Implied TTM to TTM+5y CAGR over 5.0 years | 6.928% | 11.097% | 14.844% |

The bear remains a growth case rather than a demand collapse: procedure adoption and recurring service still expand, but competition, price/mix pressure, lease timing, and weaker placements reduce growth. Base assumes a gradual fade in annual consolidated growth from 13.9% to 8.5%. Bull requires sustained category leadership, international expansion, successful da Vinci 5 and Ion adoption, and a terminal annual growth rate still above 12%; the 20% probability recognizes that burden.

## 4. Combined operating-income build by case

The statutory bridge has no corporate/unallocated adjustments and no operating bridge adjustments for either FY2025 or TTM. The forward model therefore applies no such lines. A zero in this table is a reproduction of empty sealed arrays, not a balancing plug.

| Line | Bear | Base | Bull |
|---|---|---|---|
| Sum of segment TTM+5y profit on sealed common metric, USD B | 3.856082 | 6.255989 | 8.046090 |
| Corporate/unallocated adjustments from Section 3a, USD B | 0.000000 | 0.000000 | 0.000000 |
| Consolidated TTM+5y segment-profit metric, USD B | 3.856082 | 6.255989 | 8.046090 |
| Operating bridge adjustments from Section 3a, USD B | 0.000000 | 0.000000 | 0.000000 |

| Line | Bear | Base | Bull |
|---|---|---|---|
| **Combined statutory TTM+5y operating income, USD B** | **3.856082** | **6.255989** | **8.046090** |
| Implied statutory operating margin | 25.0% | 33.5% | 36.5% |

Arithmetic is direct: bear USD 15.424328985B × 25.0% = USD 3.856082246B; base USD 18.674593669B × 33.5% = USD 6.255988879B; bull USD 22.044081923B × 36.5% = USD 8.046089902B. No EBITDA, adjusted operating profit, or product margin enters the calculation.

The margin paths retain SBC inside operating expense. Bear declines from the 31.28% TTM margin to 25.0% as tariffs, discounting, launch costs, R&D, direct-distribution expense, and support intensity offset revenue growth. Base rises to 33.5% through healthier gross margins and measured SG&A leverage while R&D remains 13.2% of revenue. Bull reaches 36.5%, requiring manufacturing maturation, service recovery, tariff mitigation, utilization, and expense leverage together. The management YELLOW and moat YELLOW findings constrain confidence in the upper path but do not alter its reviewed arithmetic.

## 5. Net income and quote-unit EPS build

The sealed historical below-line label is `Interest and other income, net`. It is not split into separate interest and other-income components because the upstream package does not source-disclose such a forecast classification. The terminal model therefore retains the exact combined label. Terminal liquidity begins with the Q2 2026 cash-plus-investments balance of USD 8.6255B. Bear holds that pool flat and applies a 2.5% normalized combined yield; base retains USD 0.6B annually after modeled buybacks and applies 3.0%; bull retains USD 1.3B annually and applies 3.5%. These rates are below or around the roughly 4% TTM combined yield on the liquid-asset base, avoiding reliance on a permanently high rate.

Normalized tax rates are 24.0%, 22.5%, and 21.0% for bear, base, and bull. They deliberately exceed the 13.1% FY2025 statutory effective rate because historical excess tax benefits on employee equity awards are not assumed to recur. The base aligns with management's 22%–23% 2026 non-GAAP context. The attributable-income bridge also deducts USD 25M, USD 20M, and USD 15M of noncontrolling interest, respectively, around the TTM USD 19.1M sealed deduction. This preserves the statutory bridge's post-tax ownership line rather than silently dropping it.

| Line | Bear | Base | Bull |
|---|---|---|---|
| Combined TTM+5y statutory OI, USD B | 3.856082 | 6.255989 | 8.046090 |
| Net interest income, separately disclosed | Unavailable; included in exact combined line | Unavailable; included in exact combined line | Unavailable; included in exact combined line |
| Interest and other income, net, USD B | 0.215638 | 0.348765 | 0.529393 |
| **Pre-tax income, USD B** | **4.071720** | **6.604754** | **8.575482** |
| Normalized tax rate | 24.0% | 22.5% | 21.0% |
| Income-tax expense, USD B | (0.977213) | (1.486070) | (1.800851) |
| Less: net income attributable to noncontrolling interest, USD B | (0.025000) | (0.020000) | (0.015000) |
| **Net income attributable to common shareholders, USD B** | **3.069507** | **5.098684** | **6.759631** |
| Quote-basis diluted financial shares at TTM+5y, M | 361.050 | 355.489 | 350.514 |
| EPS in reporting currency per quote-basis financial share | 8.5016 | 14.3428 | 19.2849 |
| Financial shares per listed unit | 1.0 | 1.0 | 1.0 |
| EPS in reporting currency per listed unit | 8.5016 | 14.3428 | 19.2849 |
| FX: quote currency per reporting currency | 1.0 | 1.0 | 1.0 |
| **EPS in quote currency per listed unit at TTM+5y** | **USD 8.5016** | **USD 14.3428** | **USD 19.2849** |

The mandatory unit arithmetic is explicit. For base, `USD 5.098684256B ÷ 355.488511M = USD 14.342754` per quote-basis financial share. Multiplication by 1.0 financial share per listed unit and 1.0 USD per reporting USD reproduces USD 14.342754 per listed common share. Bear and bull use the same identity bridge; no ADR, class, split, or currency

conversion is hidden.

### 5a. Return-method input bridge

This section supplies the inputs that a later security-return stage may use. It does not select the primary valuation method. The statutory EPS bridge is complete and therefore can support a P/E method. The EV/NOPAT bridge is not eligible to control because the Q2 package does not separately disclose current operating lease liabilities and does not supply governed terminal paths for leases, minority interest, preferred equity, or other senior claims. Those gaps are shown as `Unavailable`; they are not collapsed into a net-debt plug.

| Return-method input at 2031-06-30 | Bear | Base | Bull | Source-bound path or limitation |
|---|---|---|---|---|
| Statutory operating income, USD B | 3.856082 | 6.255989 | 8.046090 | Reviewed segment revenue × exact Income from operations margin |
| Normalized cash tax rate | 24.0% | 22.5% | 21.0% | Normalization around management's 22%–23% context; excludes recurring excess-tax-benefit assumption |
| Normalized NOPAT, USD B | 2.930623 | 4.848391 | 6.356411 | Statutory OI × one minus normalized cash tax rate |
| Cash plus short- and long-term investments, USD B | 8.6255 | 11.6255 | 15.1255 | Q2 2026 USD 8.6255B anchor plus annual post-buyback retention of USD 0.0B, USD 0.6B, or USD 1.3B |
| Gross debt, USD B | 0.0000 | 0.0000 | 0.0000 | Official debt is zero at FY2025 and Q2 2026; no debt financing introduced |
| Operating lease liabilities | Unavailable | Unavailable | Unavailable | FY2025 was USD 0.1709B; Q2 2026 amount is not separately disclosed and no governed terminal path exists |
| Preferred equity | Unavailable | Unavailable | Unavailable | No governed terminal path in the sealed downstream package |
| Minority interest balance | Unavailable | Unavailable | Unavailable | Income deduction is modeled, but a terminal balance-sheet claim is not supplied |
| Other senior claims | Unavailable | Unavailable | Unavailable | No governed terminal claim perimeter is supplied |
| Separately valued non-operating assets, USD B | 0.0000 | 0.0000 | 0.0000 | No asset is carved out or separately valued in synthesis |
| Diluted listed-equivalent shares, M | 361.050 | 355.489 | 350.514 | Explicit five-year share paths below; unit factors equal 1.0 |
| Statutory diluted EPS, USD per listed unit | 8.5016 | 14.3428 | 19.2849 | Attributable NI divided by scenario diluted listed equivalents |

The cash path is a scenario input, not an equity-value add-on. If a later stage chooses P/E, cash and debt must not be separately added or subtracted after EPS × exit P/E because the statutory earnings and chosen equity multiple already incorporate capital structure. If a later stage attempts EV/NOPAT, it must first source-bind the unavailable claim paths; otherwise the method contract requires P/E. Distributions are zero in the historical package and this synthesis does not introduce a dividend.

## 6. Explicit five-year share-count paths

The starting point in every scenario is the sealed 357.3M quote-basis diluted financial shares. The TTM repurchase pace of USD 3.5578B exceeded TTM FCF of USD 3.2226B and is not extrapolated. The modeled annual buybacks—USD 0.5B bear, USD 1.0B base, and USD 1.5B bull—sit within the historically lumpy zero-to-USD 3.6B range and preserve liquidity. Average repurchase prices of USD 400, USD 475.67, and USD 525 are transaction-path assumptions used only to calculate shares retired; USD 475.67 is the disclosed H1 2026 average.

TTM SBC was USD 826.2M. Base SBC issuance uses the required approximation: USD 826.2M ÷ USD 475.67 per share = 1.737M, rounded conservatively to 1.740M annually. Bear raises issuance to 2.000M to reflect weaker price and heavier award dilution; bull uses 1.500M as a higher-price/lower-unit stress. SBC expense remains included in operating income in all cases, so the share issuance is not an earnings add-back.

### Bear share path

| Year ending | Starting quote-basis financial shares, M | Buyback, USD B | Avg price, USD | Shares retired, M | SBC issuance, M | Ending quote-basis financial shares, M |
|---|---|---|---|---|---|---|
| 2027-06-30 | 357.300 | 0.500 | 400.00 | 1.250 | 2.000 | 358.050 |
| 2028-06-30 | 358.050 | 0.500 | 400.00 | 1.250 | 2.000 | 358.800 |
| 2029-06-30 | 358.800 | 0.500 | 400.00 | 1.250 | 2.000 | 359.550 |
| 2030-06-30 | 359.550 | 0.500 | 400.00 | 1.250 | 2.000 | 360.300 |
| 2031-06-30 | 360.300 | 0.500 | 400.00 | 1.250 | 2.000 | 361.050 |

Bear tie: 357.300M + 5 × (2.000M – 1.250M) = 361.050M.

### Base share path

| Year ending | Starting quote-basis financial shares, M | Buyback, USD B | Avg price, USD | Shares retired, M | SBC issuance, M | Ending quote-basis financial shares, M |
|---|---|---|---|---|---|---|
| 2027-06-30 | 357.300 | 1.000 | 475.67 | 2.102 | 1.740 | 356.938 |
| 2028-06-30 | 356.938 | 1.000 | 475.67 | 2.102 | 1.740 | 356.575 |
| 2029-06-30 | 356.575 | 1.000 | 475.67 | 2.102 | 1.740 | 356.213 |
| 2030-06-30 | 356.213 | 1.000 | 475.67 | 2.102 | 1.740 | 355.851 |
| 2031-06-30 | 355.851 | 1.000 | 475.67 | 2.102 | 1.740 | 355.489 |

Base tie at full precision: 357.300M + 5 × (1.740M – 2.102297812M) = 355.488511M.

### Bull share path

| Year ending | Starting quote-basis financial shares, M | Buyback, USD B | Avg price, USD | Shares retired, M | SBC issuance, M | Ending quote-basis financial shares, M |
|---|---|---|---|---|---|---|
| 2027-06-30 | 357.300 | 1.500 | 525.00 | 2.857 | 1.500 | 355.943 |
| 2028-06-30 | 355.943 | 1.500 | 525.00 | 2.857 | 1.500 | 354.586 |
| 2029-06-30 | 354.586 | 1.500 | 525.00 | 2.857 | 1.500 | 353.229 |
| 2030-06-30 | 353.229 | 1.500 | 525.00 | 2.857 | 1.500 | 351.871 |
| 2031-06-30 | 351.871 | 1.500 | 525.00 | 2.857 | 1.500 | 350.514 |

Bull tie at full precision: 357.300M + 5 × (1.500M – 2.857142857M) = 350.514286M. These paths show why buybacks cannot be assumed to maintain EPS automatically: bear dilution persists despite USD 2.5B of cumulative repurchases, while base achieves only a 0.5% five-year reduction despite USD 5.0B of purchases.

## 7. P/E 15 entry-price test

Required EPS at the packet price is USD 378.81 ÷ 15 = **USD 25.2540 per listed unit**. Cushion equals `(EPS × 15 – USD 378.81) ÷ USD 378.81`. The base case controls the binary gate; bull cannot rescue a base failure.

| Case | EPS in quote currency per listed unit at TTM+5y | EPS × 15 | Quote-packet price per listed unit | Cushion | Pass? |
|---|---|---|---|---|---|
| Bear | USD 8.5016 | USD 127.52 | USD 378.81 | -66.34% | FAIL |
| Base | USD 14.3428 | USD 215.14 | USD 378.81 | -43.21% | FAIL |
| Bull | USD 19.2849 | USD 289.27 | USD 378.81 | -23.64% | FAIL |

The P/E 15 gate is **FAIL — base cushion -43.21%**. Even the bull case fails the mechanical 15× threshold. This result does not select an exit P/E or calculate shareholder IRR; those are separate security-return tasks. It says only that five-year statutory EPS at a 15× hurdle does not cover the sealed current price.

## 8. Reflexivity and historical-anchor checks

The combined model is bottoms-up within the issuer's one-segment structure. TTM product revenue is USD 6.5984B Instruments and accessories + USD 2.7120B Systems + USD 1.7240B Services = USD 11.0344B, exactly consolidated TTM revenue. The sole segment's TTM `Income from operations` is USD 3.4512B. Empty corporate and operating adjustment arrays leave statutory TTM OI at USD 3.4512B, a zero residual and zero percentage difference.

FY2025 provides the historical sanity check only. Segment revenue of USD 10.0647B equals consolidated revenue. Segment `Income from operations` of USD 2.9455B plus no corporate or operating adjustments equals statutory OI of USD 2.9455B. The sealed bridge validator reports all five residuals at USD 0.0M, within the FY2025 tolerance of USD 1.6557M and TTM tolerance of USD 1.9029M. Nothing in the forward build alters those historical endpoints.

| Reflexivity check | Segment or product sum, USD B | Consolidated statutory value, USD B | Difference | Result |
|---|---|---|---|---|
| TTM revenue | 11.0344 | 11.0344 | 0.0000; 0.00% | PASS |
| TTM Income from operations | 3.4512 | 3.4512 | 0.0000; 0.00% | PASS |
| FY2025 revenue | 10.0647 | 10.0647 | 0.0000; 0.00% | PASS |
| FY2025 Income from operations | 2.9455 | 2.9455 | 0.0000; 0.00% | PASS |

## 9. Latest interim bridge reconciliation

**TRIGGERED — the four-quarter TTM uses derived standalone periods.** Q4 2025 equals FY2025 less 9M 2025, and Q2 2026 cash-flow components equal H1 2026 less Q1 2026. The income-statement TTM is equivalently FY2025 less H1 2025 plus H1 2026. The coverage is identical—January 1 through June 30 for both H1 periods—and there is no overlap with the retained second-half 2025 amounts.

| Metric | FY2025 | Less H1 2025 | Add H1 2026 | TTM ended 2026-06-30 | Four-quarter cross-check |
|---|---|---|---|---|---|
| Revenue, USD B | 10.0647 | (4.6934) | 5.6631 | 11.0344 | 2.5051 + 2.8662 + 2.7708 + 2.8923 = 11.0344 |
| Income from operations, USD B | 2.9455 | (1.3215) | 1.8272 | 3.4512 | 0.7597 + 0.8643 + 0.8553 + 0.9719 = 3.4512 |
| Net income attributable, USD B | 2.8560 | (1.3568) | 1.6396 | 3.1388 | 0.7044 + 0.7948 + 0.8215 + 0.8181 = 3.1388 |
| Diluted shares, M | 362.7 annual average | 364.35 for two quarters | 358.55 for two quarters | 359.8 | (361.8 + 360.3 + 359.8 + 357.3) ÷ 4 = 359.8 |

For shares, the weighted numerator is used rather than subtracting share averages as if they were dollars: `(4 × 362.7 − 2 × 364.35 + 2 × 358.55) ÷ 4 = 359.8M`. The named TTM quarters are Q3 2025, derived Q4 2025, Q1 2026, and derived Q2 2026 where needed. Quarterly EPS is not summed.

## 10. Sensitivity — variables that matter

The base model holds all other assumptions fixed for each one-factor change. Revenue CAGR sensitivity changes the sole segment's five-year CAGR by ±200 basis points from 11.0965%, holds the 33.5% margin, below-line income, tax, NCI, and 355.488511M shares constant. Because the company has only one reportable segment, a literal “Segment 2 margin” sensitivity is not triggered; the economically equivalent and more conservative test varies the sole segment's exact `Income from operations` margin by ±200 basis points. Share count varies the terminal denominator by ±5%. Tax varies 22.5% by ±300 basis points.

| Variable changed from base | Down case | Base | Up case | EPS range / impact |
|---|---|---|---|---|
| Sole segment revenue CAGR | 9.0965%; USD 17.0531B terminal revenue | 11.0965%; USD 18.6746B | 13.0965%; USD 20.4171B | USD 13.1585 to USD 15.6154; -1.1842 to +1.2726 |
| Segment 2 margin | NOT TRIGGERED; no second reportable segment | NOT TRIGGERED | NOT TRIGGERED | No unsupported second-segment profit is invented |
| Sole segment Income from operations margin | 31.5% | 33.5% | 35.5% | USD 13.5285 to USD 15.1570; ±0.8142 |
| Terminal diluted shares | 373.263M; +5% shares | 355.489M | 337.714M; -5% shares | USD 13.6598 to USD 15.0976; -0.6830 to +0.7549 |

| Variable changed from base | Down case | Base | Up case | EPS range / impact |
|---|---|---|---|---|
| Normalized tax rate | 25.5%; +300 bps | 22.5% | 19.5%; -300 bps | USD 13.7854 to USD 14.9001; ±0.5574 |

Revenue growth has the greatest modeled EPS range, followed by the exact operating margin. Those are the primary kill/trigger variables. Share count matters but does not approach the USD 25.254 required EPS even at 5% fewer shares. Tax normalization has the smallest listed impact. No sensitivity flips the P/E 15 result: even the favorable revenue-CAGR case produces USD 15.6154 EPS and USD 234.23 at 15×, still 38.17% below the packet price.

## 11. Combined earnings summary

| Case | Revenue, USD B | OI, USD B | OI margin | NI, USD B | EPS, USD per listed unit | Probability | EPS × 15 | Vs. USD 378.81 per listed unit |
|---|---|---|---|---|---|---|---|---|
| Bear | 15.424329 | 3.856082 | 25.0% | 3.069507 | 8.5016 | 25% | 127.52 | -66.34% |
| Base | 18.674594 | 6.255989 | 33.5% | 5.098684 | 14.3428 | 55% | 215.14 | -43.21% |
| Bull | 22.044082 | 8.046090 | 36.5% | 6.759631 | 19.2849 | 20% | 289.27 | -23.64% |
| Probability-weighted EPS | — | — | — | — | 13.8709 | 100% | 208.06 | -45.08% |

Probability-weighted EPS is `25% × USD 8.501612 + 55% × USD 14.342754 + 20% × USD 19.284895 = USD 13.870897`. This is an arithmetic scenario summary, not a probability-weighted IRR. A later return stage must weight terminal shareholder wealth and take the CAGR of that expected wealth; it must not average scenario IRRs.

## 12. Tie-out checks

- **PASS — reported-financial and statutory-bridge tie-out for TTM and FY2025.** `data_package.md` Sections 2 and 3a and sealed `statutory_bridge.json` show TTM segment revenue USD 11.0344B = consolidated revenue USD 11.0344B; segment `Income from operations` USD 3.4512B + zero corporate adjustments + zero operating adjustments = statutory OI USD 3.4512B. FY2025 revenue USD 10.0647B ties exactly, and segment OI USD 2.9455B = statutory OI USD 2.9455B. All sealed residuals are USD 0.0M, within both packet tolerances and within 2%.

- **PASS — NI, shares, listed unit, and FX reproduce EPS.** From Section 5: bear `3,069.507007M ÷ 361.050M × 1.0 × 1.0 = USD 8.501612`; base `5,098.684256M ÷ 355.488511M × 1.0 × 1.0 = USD 14.342754`; bull `6,759.631097M ÷ 350.514286M × 1.0 × 1.0 = USD 19.284895`. All cases use one financial share per listed unit and USD/USD FX of 1.0 from `quote_packet.json`.

- **PASS — segment sum at horizon.** Section 3 shows one segment: bear USD 15.424328985B ÷ USD 15.424328985B = 100.000%; base USD 18.674593669B ÷ USD 18.674593669B = 100.000%; bull USD 22.044081923B ÷ USD 22.044081923B = 100.000%. Corporate eliminations are zero as disclosed, not a plug.

- **PASS — product-to-segment rollup.** Reviewed `appendix_B_consolidated_company.md` Section 10 shows bear `9.779 + 3.113 + 2.532 = 15.424`; base `11.618 + 4.019 + 3.037 = 18.674`, a displayed USD 0.001B rounding difference to 18.675; bull `13.495 + 5.082 + 3.466 = 22.043`, a displayed USD 0.001B rounding difference to 22.044. The reviewed appendix states unrounded sums reconcile within 0.01%, well inside 1%.

- **PASS — weighted margin check.** Product-level operating margins are a true non-disclosure, so the reviewed segment does not fabricate them. On the disclosed bridge basis, bear combined product revenue USD 12.892B at 63.8% gross margin plus Services USD 2.532B at 65.0% produces 63.997% consolidated gross margin; less 15.0% R&D and 24.0% SG&A/other yields 24.997%, rounded to 25.0%. Base produces 68.833% gross margin and 33.533% after 13.2% and 22.1% expenses, rounded to 33.5%. Bull produces 71.043% gross margin and 36.543% after 12.7% and 21.8%, rounded to 36.5%. All differences are far below 1%; source is reviewed B Section 9.

- **PASS — share count and security-unit path.** `quote_packet.json` shows 357.3M financial-statement diluted shares × 1.0 split factor = 357.3M quote-basis shares; ÷ (1.0 depositary ratio × 1.0 class factor) = 357.3M listed equivalents. Section 6 then reconciles each five-year path exactly: bear 357.300 + 5 × (2.000 − 1.250) = 361.050M; base 357.300 + 5 × (1.740 − 2.102297812) = 355.488511M; bull 357.300 + 5 × (1.500 − 2.857142857) = 350.514286M.

- **PASS — growth plausibility.** The sole segment base CAGR is 11.097%. It does not exceed 1.2× the disclosed three-year historical consolidated trajectory; FY2022 USD 6.222B to FY2025 USD 10.065B is approximately 17.4% CAGR, and 1.2× is approximately 20.9%. The reviewed B appendix also keeps Instruments, Systems, and Services base CAGRs below 1.2× their disclosed historical CAGRs. Sources are `data_package.md` Sections 2–5 and reviewed B Section 8.

- **PASS — historical forward-table arithmetic over exactly five years.** Recalculation from reviewed B Section 8 gives, in USD B: bear Instruments `6.5984 × 1.11 × 1.09 × 1.08 × 1.07 × 1.06 = 9.77916` vs. 9.779; Systems `2.712 × 1.04 × 1.02 × 1.02 × 1.03 × 1.03 = 3.11313` vs. 3.113; Services `1.724 × 1.10 × 1.09 × 1.08 × 1.07 × 1.06 = 2.53204` vs. 2.532. Base recalculates to 11.61821, 4.01932, and 3.03707 vs. 11.618, 4.019, and 3.037. Bull recalculates to 13.49546, 5.08235, and 3.46627 vs. 13.495, 5.082, and 3.466. Every error is below 0.01%, far inside 1%, and every span is five years.

- **PASS — recency anchor.** The first base forward year is USD 12.564B against TTM USD 11.0344B, a 13.9% increase. This exceeds the mechanical 10% comparison band, but the reviewed appendix supplies quantified primary evidence for the step: management's FY2026 da Vinci procedure guidance is 13.5%–15.5% nearer midpoint, Q2 2026 revenue grew 18.5%, and recurring revenue was 85% of Q2 revenue. The modeled 13.9% first year is below recent revenue growth and centered on the procedure range. Source: `data_package.md` Sections 5–6 and reviewed B Section 8.1.

- **PASS — period and horizon integrity.** Section 9 reproduces `FY2025 − H1 2025 + H1 2026` with January-through-June comparable periods and separately shows Q3 2025 + derived Q4 2025 + Q1 2026 + derived Q2 2026. Revenue, OI, NI, and diluted-share arithmetic tie to P4. The forecast begins 2026-06-30 and ends 2031-06-30, exactly 5.0 calendar years. No FY2025 forecast anchor, overlap, six-year exponent, or summed quarterly EPS appears.

- **PASS — valuation, unit bridge, hashes, and probability arithmetic.** The strict validators recomputed packet SHA-256 `55800c98515aec3b71f686260dff9b5f8927713d58d15bf7e114c048a40baddf` and statutory bridge SHA-256 `b4b2b67ea0378b32430a371e385d3f0b10487ba53444ea90eeb7f2983638229b`. Listing, price, split, depositary, class, and FX factors reproduce the packet. Section 7 shows EPS × 15 for all cases and recomputes cushion against USD 378.81. Probabilities total `25% + 55% + 20% = 100%`; weighted EPS equals USD 13.870897. Base controls the P/E 15 gate and fails with a -43.21% cushion.

## Synthesis gate

**SYNTHESIS CLEARED — 11/11 TIE-OUTS PASSED.** The full model is arithmetically reconciled to the reviewed segment rollup, the DR-cleared statutory bridge, and the sealed quote and security-unit packet. The base case reaches USD 18.674594B revenue, USD 6.255989B statutory operating income, USD 5.098684B attributable net income, and USD 14.3428 EPS per listed common share at 2031-06-30. Required EPS at 15× is USD 25.2540, leaving a -43.21% cushion and a binary P/E 15 gate failure.

# Intuitive Surgical - Compounder Score

**Ticker / exchange:** ISRG / Nasdaq Global Select Market (XNAS) **Analysis date:** 2026-08-08 **Reporting and return currency:** USD **Security:** one common share; no ADR, class, split, or FX conversion in the local-currency bridge **Current price:** USD 378.81, the completed 2026-08-07 close sealed in `quote_packet.json` **Exact underwriting horizon:** 2026-06-30 to 2031-06-30, 5.0 years **Primary valuation method: P/E Diagnostic only:** this appendix has no trade, ranking, sizing, portfolio-mutation, broker, message, or BUY-queue authority.

## 1. Executive Verdict

**Compounder Score: 66/100. Business Quality: 64/80. Valuation / 20% Return Underwriting: 2/20. Score-implied classification: Reject. Confidence: Medium-high.**

The evidence supports a high-quality robotic-surgery ecosystem, but it does not support buying the listed security at USD 378.81 under a rubric that demands a 20% annualized five-year return. The installed base, procedure-linked instruments, service footprint, training, regulatory infrastructure, and 85% recurring-revenue mix create a real flywheel. Revenue grew at a 15.2% FY2021-FY2025 CAGR, the analytical five-year median ROIC was about 21.1%, and a conservative adjusted ROIIC range remains well above an ordinary cost of capital. The balance sheet has USD 8.6255 billion of cash and investments and no official gross borrowings at 2026-06-30.

The evidence also imposes material caps. FMP standardized ROIC was only 11.9%-13.7% in FY2023-FY2025, cash conversion was uneven before the latest year, and a large cash balance depresses returns on total shareholder capital. SBC was 7.8% of FY2025 revenue and 31.6% of FY2025 FCF. Approximately USD 5.32 billion of 2022-2025 buybacks plus USD 1.51 billion in H1 2026 produced only a modest endpoint share-count reduction. Management and moat gates are both YELLOW, reflecting the short CEO-seat record, buyback efficiency, and the first credible U.S. multi-platform competitive cycle.

The valuation result is the decisive veto. Using the one frozen P/E method, scenario-specific exit multiples of 24x bear, 30x base, and 36x bull are all below the current 43.42x TTM P/E and far below the 2016-2025 FMP year-end median of 68.34x. Even so, gross USD IRRs are -11.64%, 2.58%, and 12.88%. The probability-weighted gross USD IRR is 2.40%, calculated from expected terminal wealth, not from an average of scenario IRRs. The corresponding probability-weighted net-SGD IRR is 1.43% after explicit costs and scenario FX. A 20% gross return at the base 30x exit multiple requires USD 31.4200 of terminal EPS, a 29.21% CAGR from current TTM statutory EPS, versus modeled base terminal EPS of USD 14.3428.

## 2. Data Source Map

| Evidence need | Controlling source | Period / basis | Use in this score |
|---|---|---|---|
| Price and security unit | `quote_packet.json`; `quant_foundation.md` | 2026-08-07 close; 357.3M quote-basis diluted shares | USD 378.81 price, XNAS common-share identity, current market cap |
| Income statement and EPS | `quant_foundation.md`; `data_package.md`; `appendix_synthesis.md` | FY2021-FY2025 and TTM 2026-06-30 | Revenue, OI, NI, diluted EPS, terminal EPS |
| Balance sheet and liquidity | `data_package.md`; `appendix_synthesis.md` | FY2025 and Q2 2026 | Cash/investments, debt, lease limitation, scenario cash paths |
| Cash flow, capex, SBC, buybacks | `quant_foundation.md`; `data_package.md` | FY2021-FY2025 and TTM | FCF conversion, reinvestment, dilution, capital allocation |
| Segment and operating drivers | `appendix_B_consolidated_company.md` | TTM to 2031-06-30 | Revenue, margin, OI, procedures, installed-base runway |
| Management and governance | `appendix_management.md` | Evidence through 2026-08-08 | Incentives, capital allocation, CEO tenure, controls |
| Moat and competitors | `appendix_moat.md` | Evidence through 2026-08-08 | Switching costs, pricing, entrants, 2046 durability |
| Combined earnings model | `appendix_synthesis.md` | Exact 5.0-year horizon | Terminal EPS, shares, NOPAT, P/E 15 test |
| Historical valuation | Live FMP stable key-metrics endpoint | FY2016-FY2025, pulled 2026-08-08 | Year-end earnings-yield inversions; 33.00x-90.25x range, 68.34x median |

The current quote-based market capitalization is USD 135.348813 billion: USD 378.81 multiplied by 357.3 million diluted quote-basis shares. A current EV proxy is USD 126.723313 billion after subtracting Q2 2026 cash and investments and assuming the officially reported zero gross debt. It is a proxy, not a complete EV, because the Q2 filing does not separately disclose the current operating-lease liability. The P/E method avoids pretending that the missing lease claim can be filled by a residual.

## 3. Key Financial and Quality Metrics

| Metric | 1-year / latest | 3-year | 5-year or longest governed span | 10-year | Interpretation |
|---|---|---|---|---|---|
| Revenue growth | FY2025 20.5%; Q2 2026 YoY 18.5% | FY2022-FY2025 about 17.4% CAGR | FY2021-FY2025 15.2% CAGR | Insufficient governed history | Strong, but forward base fades to 11.1% CAGR |
| NOPAT growth | FY2025 analytical NOPAT USD 2.559B | Positive | FY2021-FY2025 about 11.34% CAGR | Insufficient governed history | Slower than revenue through investment cycle |

| Metric | 1-year / latest | 3-year | 5-year or longest governed span | 10-year | Interpretation |
|---|---|---|---|---|---|
| FCF growth | FY2025 FCF USD 2.491B | Recovered sharply | FY2021-FY2025 about 9.45% CAGR | Insufficient governed history | Volatile because facilities and lease assets absorb cash |
| Analytical ROIC | FY2025 21.1% | 20.0%-21.8% FY2023-FY2025 | Five-year median about 21.1% | Insufficient governed history | Good operating return after transparent cash treatment |
| FMP standardized ROIC | FY2025 13.71% | 11.89%-13.71% | Below persistent 15% threshold | 12.27%-15.01% in FY2016-FY2019 context | Total-capital efficiency remains a real caution |
| Adjusted ROIIC | Indicative only | 29.1%-41.0% | 31.1%-46.3% | Insufficient governed history | Range depends on conservative R&D growth-capital treatment |
| FCF / NOPAT | FY2025 97.3%; TTM FCF / attributable NI 102.7% | Uneven | FY2021-FY2025 aggregate about 78.4% | Insufficient governed history | Acceptable, not uniformly excellent |
| Reinvestment rate | Cycle-dependent | About 49%-65% on adjusted basis | About 51% of aggregate NOPAT | Insufficient governed history | High enough to support growth, with physical buildout volatility |
| Diluted share CAGR | FY2025 endpoint not monotonic | Mixed | FY2021-FY2025 about -0.21% annually | Insufficient governed history | Buybacks mostly offset SBC rather than creating large shrinkage |
| SBC / revenue | FY2025 7.83% | About 8% | Persistently material | Insufficient governed history | Real cost retained in OI and EPS |
| SBC / FCF | FY2025 31.65% | High | Material | Insufficient governed history | Caps accounting and allocation scores |
| Net debt / EBITDA | FY2025 -1.49x | Net cash | Net cash | Insufficient governed history | Balance-sheet risk is low |
| TTM FCF yield | 2.38% at current price | N/A | N/A | N/A | Thin cash yield at entry |
| Current P/E | 43.42x TTM statutory EPS | N/A | FY2021-FY2025 year-end 65.90x-79.82x | FY2016-FY2025 median 68.34x | Lower than recent history, still demanding versus forward return |

The adjusted ROIIC range is deliberately not a point estimate. NOPAT uses a normalized 22.5% tax rate. Three-year NOPAT rises from USD 1.2223 billion in FY2022 to USD 2.2828 billion in FY2025. Cumulative net capex, working-capital investment, and acquisitions imply about 41.0% ROIIC before an R&D growth-capital adjustment; treating 30% of R&D as growth capital lowers it to 29.1%. The analogous five-year range is 31.1%-46.3%. The range supports a score of 6/8 rather than 8/8: returns appear attractive, but the split between maintenance and growth R&D is not issuer-disclosed.

## 4. Rubric Scorecard

| Category | Score | Maximum | Evidence-based cap |
|---|---|---|---|
| Incremental returns on capital | 20 | 25 | Strong analytical ROIC and adjusted ROIIC; definition dispersion and cash conversion prevent top marks |
| Reinvestment runway | 18 | 20 | Procedures, OUS adoption, Ion, SP, da Vinci 5, XiR, service, and leases provide multiple paths |
| Durability of moat | 11 | 15 | Workflow and ecosystem moat is real; pricing purity and multi-platform durability remain unproven |
| Accounting and financial quality | 9 | 10 | Clean controls, net cash, and strong disclosure; material SBC is the deduction |
| Capital allocation | 6 | 10 | Rational R&D and little historical M&A; buyback price discipline and incentive design are weaker |
| Price and 20% return underwriting | 2 | 20 | Conservative multiples still produce only 2.58% base and 2.40% probability-weighted gross IRR |
| **Business Quality Score** | **64** | **80** | Strong franchise, below the rubric's 65-point quality threshold |
| **Compounder Score** | **66** | **100** | Reject under the explicit below-70 rule and hard-veto screen |

Subcategory scoring is as follows. Incremental returns: 4/5 normalized ROIC, 6/8 ROIIC, 2/3 trend stability, 3/3 unit-economics support, 2/3 cash conversion, and 3/3 lack of a negative-capital accounting artifact. Runway: 5/5 market

opportunity, 5/5 reinvestment at scale, 4/4 organic growth, 2/3 repeatability, 1/2 market structure, and 1/1 no required ROIC collapse. Moat: 4/4 source of advantage, 2/3 pricing power, 2/3 competitive evidence, 2/2 stickiness, 1/2 stress resilience, and 0/1 disruption risk. Accounting: 2/2 revenue quality, 2/2 cash support, 1/2 SBC/dilution, 2/2 balance sheet, 1/1 transparency, and 1/1 governance. Allocation: 2/2 internal reinvestment, 2/2 acquisition discipline, 0/2 buybacks, 1/2 incentives, 0/1 owner mentality, and 1/1 past decisions.

## 5. ROIIC and Reinvestment Analysis

The strongest claim is not that every published ROIC definition is high. It is that incremental operating earnings have grown faster than a conservative estimate of incremental operating capital. The reported data show a heavy physical-investment cycle: capex rose above USD 1.0 billion in FY2023 and FY2024, then fell to USD 0.540 billion in FY2025. R&D rose every year from USD 0.671 billion in FY2021 to USD 1.312 billion in FY2025. Net working capital also increased materially with inventory, receivables, lease assets, and a larger platform footprint.

The score therefore uses two ROIIC bookends. The upper calculation treats net capex, changes in non-cash working capital, and acquisitions as reinvestment. The lower calculation adds 30% of R&D as an explicitly conservative growth-capital adjustment; the remaining R&D is treated as maintenance and replacement of the knowledge base. Over three years, those approaches produce about 41.0% and 29.1% ROIIC. Over five years, they produce about 46.3% and 31.1%. Acquisitions are included: they were immaterial historically, while the March 2026 distributor acquisition is too recent to enter a completed-period return calculation.

This is credible evidence of high ROIIC, not proof of a permanent 35% rate. The numerator benefits from margin recovery after the capacity build. The denominator depends on an analyst split of R&D because the issuer does not disclose maintenance versus growth research. Usage-based leases also shift more capital onto Intuitive's balance sheet, so procedure and utilization outcomes matter. The score is capped at 6/8 until post-2026 returns show that new facilities, da Vinci 5, Ion, and direct distribution sustain incremental NOPAT without requiring proportionally more capital.

## 6. Runway Analysis

The runway is broad and largely organic. Da Vinci procedures increased from 1.594 million in FY2021 to 3.153 million in FY2025; Ion procedures rose from 7,400 to 144,100. At Q2 2026, the installed bases were 11,710 da Vinci systems and 1,096 Ion systems. General surgery, OUS adoption, SP, da Vinci 5, XiR, Ion, new indications, direct distribution, service, and flexible leasing offer distinct growth mechanisms. Instruments and accessories represented 59.8% of TTM revenue, so procedure adoption translates into repeat revenue rather than relying on continual capital sales.

The base model grows revenue from USD 11.0344 billion to USD 18.6746 billion, an 11.10% CAGR, while operating margin rises from 31.28% to 33.5%. This does not require R&D cuts: terminal R&D remains 13.2% of revenue. The bear still grows revenue at 6.93%, but margin falls to 25.0% as tariffs, competition, launch cost, leasing, and support intensity absorb scale. That asymmetry is why runway receives 18/20 rather than 20/20. A large market does not guarantee that Intuitive retains the economics when competitors can win incremental rooms or bundle broader surgical portfolios.

## 7. Moat Analysis

The moat can be stated in one paragraph. Hospitals adopt a regulated clinical workflow that combines a robot, compatible limited-life instruments, service, trained surgeons and teams, credentialing, room setup, sterile processing, and procedure support. More systems and training enable more procedures; more procedures drive instruments and service; recurring economics fund R&D, regulatory work, field support, and product breadth. Switching an established program is costly and operationally risky, while Intuitive's scale improves service density, evidence generation, and quality infrastructure.

The moat is not monopoly protection. Medtronic Hugo, J&J OTTAVA, CMR Versius, MONARCH in lung intervention, and regional systems can win new rooms without removing the installed base. Hospitals can dual-source and use procurement leverage. Purchased-system ASP is a mixture of platform, geography, price, trade-ins, and FX, so a rising ASP does not prove pure pricing power. The moat gate and 2046 durability test are both YELLOW. Instruments and service are the strongest layers; Ion is less seasoned; generic digital features are the most replicable. This supports 11/15.

## 8. Accounting and Capital Allocation Analysis

Revenue taxonomy and statutory earnings reconcile cleanly. The company reports one segment, and the exact modeled metric `Income from operations` ties to the statutory statements without plugs. TTM revenue, OI, NI, diluted shares, and EPS are built from named quarters. PwC and management reported effective internal control, and no material weakness,

restatement, related-party problem, or adverse audit signal was identified. The balance sheet has no official gross borrowings.

SBC is the main accounting-quality deduction. It rose to USD 788 million in FY2025 and remains inside operating expense in every scenario. The share model separately includes issuance so the economic cost is not erased. Repurchases offset issuance, but the five-year endpoint decline in diluted shares was only about 0.21% annually. Buybacks at roughly USD 478 in FY2025 and USD 476 in H1 2026 were above the current price and did not establish an intrinsic-value discipline. R&D allocation is coherent and M&A was historically limited, but incentives emphasize procedures and adjusted margin rather than ROIC, FCF per share, or net dilution. These facts justify 9/10 accounting and 6/10 capital allocation.

## 9. 20% Return Underwriting

**PRIMARY_VALUATION_METHOD = PE.** Statutory diluted EPS is fully reconciled. EV/NOPAT cannot control because current and terminal lease, preferred-equity, minority-interest-balance, and other senior-claim paths are not all governed. P/E is used for bear, base, bull, probability weighting, the reverse-return diagnostic, the maximum-buy-price diagnostic, and the net-SGD overlay. No cash or debt is added after EPS times P/E.

Historical valuation is context, not an entitlement. Inverting the live FMP annual earnings yields gives year-end P/Es of 33.00x-90.25x in FY2016-FY2025 and a 68.34x median; FY2023-FY2025 were 65.90x, 79.82x, and 70.78x. The current TTM P/E is 43.42x. Exit multiples of 24x bear, 30x base, and 36x bull embed substantial contraction. Bear assumes competitive and margin erosion. Base recognizes continued double-digit revenue growth and ecosystem durability but denies the historical premium. Bull retains a premium for sustained category leadership, yet remains below current P/E and near the low end of the ten-year range. The separate P/E 15 gate still fails in every case and does not set these exit multiples.

| Security-return bridge | Bear | Base | Bull |
|---|---|---|---|
| Scenario probability | 25% | 55% | 20% |
| Terminal statutory OI, USD B | 3.856082 | 6.255989 | 8.046090 |
| Terminal normalized NOPAT, USD B | 2.930623 | 4.848391 | 6.356411 |
| Terminal attributable NI, USD B | 3.069507 | 5.098684 | 6.759631 |
| Terminal diluted shares, M | 361.050000 | 355.488511 | 350.514286 |
| Terminal statutory diluted EPS, USD | 8.501612 | 14.342754 | 19.284895 |
| Exit P/E | 24.0x | 30.0x | 36.0x |
| Terminal equity value per share, USD | 204.038688 | 430.282620 | 694.256220 |
| Terminal total equity value, USD B | 73.668168 | 152.960528 | 243.346723 |
| Cumulative distributions per share | 0.000000 | 0.000000 | 0.000000 |
| Terminal shareholder wealth per share, USD | 204.038688 | 430.282620 | 694.256220 |
| Gross USD annualized shareholder IRR | **-11.64%** | **2.58%** | **12.88%** |

The zero-distribution row is a governed diagnostic: the company paid no common dividend in the five-year historical package, and the synthesis does not introduce one. This is conservative and keeps buybacks in the diluted-share path rather than treating them as distributions. Scenario cash plus investments less gross debt, before leases, are USD 8.6255 billion bear, USD 11.6255 billion base, and USD 15.1255 billion bull. Gross debt is zero in every path. Those capital-structure amounts are disclosed for context only; they are not added to the P/E equity value.

Expected terminal shareholder wealth is `25% x 204.038688 + 55% x 430.282620 + 20% x 694.256220 = USD 426.516357` per share. The probability-weighted gross USD IRR is `(426.516357 / 378.81)^(1/5) - 1 = 2.400682%`, or **2.40%**. It is not the arithmetic average of scenario IRRs.

### Net-SGD overlay

Entry USD/SGD is 1.2779. Entry cost is 0.35% and exit cost is 0.35%. With zero distributions, withholding is zero. Terminal USD/SGD assumptions are 1.1501 bear (-10%), 1.2140 base (-5%), and 1.2779 bull (flat). One share requires SGD 485.775584 at entry after cost.

| Net-SGD bridge | Bear | Base | Bull |
|---|---|---|---|
| Terminal USD/SGD | 1.1501 | 1.2140 | 1.2779 |

| Net-SGD bridge | Bear | Base | Bull |
|---|---|---|---|
| Net terminal SGD wealth after 0.35% exit cost | 233.843568 | 520.534830 | 884.084858 |
| Net-SGD annualized IRR | **-13.60%** | **1.39%** | **12.72%** |

Probability-weighted net terminal SGD wealth is SGD 521.572020. Dividing by the same SGD 485.775584 entry cost basis and compounding for five years produces a **1.43% probability-weighted net-SGD IRR**. Every net-SGD result uses the same terminal P/E equity values as the gross USD bridge.

### Reverse-return and maximum-price diagnostics

At 20% annualized for five years, required terminal wealth is USD 942.600499 per current share. At the base 30x exit multiple, required EPS is USD 31.420017. Starting from TTM statutory diluted EPS of USD 8.723735, that requires a 29.2114% annual EPS CAGR. The modeled base EPS is only USD 14.342754. Alternatively, holding base EPS fixed would require a 65.72x exit P/E, above today's 43.42x and inconsistent with the frozen conservative method.

The base-case maximum price for a 20% gross USD return is USD 172.920935. The probability-weighted maximum is USD 171.407358. After the stated costs and scenario FX, the probability-weighted maximum USD entry price for a 20% net-SGD return is about USD 163.453343. These are diagnostics, not limit orders, rankings, position sizes, or trade instructions.

## 10. Hard Veto Checklist

| # | Test | Status | Evidence |
|---|---|---|---|
| 1 | ROIIC below cost of capital with no path | Pass | Adjusted 3- and 5-year ranges are about 29%-46% |
| 2 | ROIC is an artificial tiny-capital result | Watch | Analytical ROIC is strong, but FMP standardized ROIC is below 15% because shareholders own surplus cash |
| 3 | Growth requires external financing | Pass | Net cash and positive FCF; no official gross debt |
| 4 | Material dilution without value creation | Watch | Buybacks offset SBC, but net shrinkage is modest relative to spend |
| 5 | Undisclosed acquisition-return pattern | Pass | Historical M&A was small; 2026 distributor deal is disclosed but unseasoned |
| 6 | Structural FCF shortfall | Watch | FY2023-FY2024 conversion was weak; FY2025 and TTM improved |
| 7 | Permanent customer, regulatory, platform, or cyclicality risk | Watch | Multi-platform competition, China, reimbursement, and leases are material |
| 8 | 20% return requires terminal multiple expansion | **Fail** | Base would need 65.72x versus 43.42x current and 30x selected exit |
| 9 | Flawless execution needed at today's price | **Fail** | Even the modeled bull returns only 12.88% gross USD |
| 10 | Moat cannot be explained | Pass | Workflow, instruments, service, training, and installed-base flywheel are explicit |
| 11 | Accounting or governance impairs trust | Pass | Clean controls, one-class voting, no identified material red flags |
| 12 | Balance-sheet risk can wipe out equity | Pass | USD 8.6255B cash/investments and zero official gross borrowings |

## 11. Final Decision

**Score-implied classification: Reject.** The company is a high-quality compounder candidate, but the listed security fails the rubric at the present price. Total score is below 70, valuation scores only 2/20, bear-case loss is material, base and probability-weighted returns are low single digits, and hard vetoes 8 and 9 fail. A lower price could change the return arithmetic; that observation does not create trade authority.

Compounder Score note: 66/100 implies Reject under this diagnostic because strong operating quality cannot offset a 2/20 valuation score and two return vetoes. Business Quality Score note: 64/80 reflects a real ecosystem, attractive adjusted ROIIC, and a net-cash balance, capped by standardized ROIC, competitive durability, SBC, and buyback efficiency. 20%

Return UW Score note: 2/20 because base gross USD IRR is 2.58%, probability-weighted gross USD IRR is 2.40%, and the 20% hurdle requires USD 31.42 terminal EPS or about a 65.72x base exit P/E.

Portfolio context is informational only: NAV SGD 2,810,770.9, current cash 0.1%, proposed cash 6%, healthcare underweight about 4.8 percentage points, and no current ISRG holding. This score issues no rank, target size, trade, broker instruction, portfolio mutation, message, or BUY-queue action.

## 12. Machine-Readable JSON

The full-precision governed artifact is `compounder_score.json`. Its controlling return fields are summarized below.


```
{
  "primary_valuation_method": "PE",
  "current_price": 378.81,
  "exact_horizon_years": 5.0,
  "scenario_probabilities_pct": {"bear": 25.0, "base": 55.0, "bull": 20.0},
  "gross_usd_irr": {"bear": -0.116394892779982, "base": 0.0258089262672545, "bull": 0.128806934816371},
  "probability_weighted_gross_usd_irr": 0.0240068249194463,
  "net_sgd_irr": {"bear": -0.136031418858818, "base": 0.0139179749889831, "bull": 0.127227704378332},
  "probability_weighted_net_sgd_irr": 0.0143217092313317,
  "probability_weighted_irr_method": "CAGR_OF_PROBABILITY_WEIGHTED_TERMINAL_WEALTH"
}
```


# Intuitive Surgical — Scoring Audit

Analysis date: 2026-08-08 Ticker / exchange: ISRG / XNAS Reporting and return currency: USD Current price: USD 378.81 at 2026-08-07 close TTM end: 2026-06-30 Exact horizon: 5.0 years to 2031-06-30 Primary valuation method: **P/E**

This audit reconstructs the CompounderScorer output against the reconciled quantitative foundation, DR-cleared data package, reviewed consolidated-company forecast, management and moat appendices, and 11/11-cleared synthesis. It has no trade, ranking, sizing, messaging, broker, or portfolio authority.

## 1. Original vs Audited Scores

| Item | Original | Audited | Notes |
|---|---|---|---|
| Business Quality Score / 80 | 64/80 | 64/80 | The operating-quality deductions are already material and the surviving points have adequate evidence. |
| Valuation / 20% Return UW Score / 20 | 2/20 | 1/20 | The source score does not allocate its two points by subcategory. Only one point for modest modeled buyback help survives; every other price/return test is zero. |
| Total Score / 100 | 66/100 | 65/100 | One-point reduction from the return-underwriting category. |
| Classification | Reject | Reject | Below 70, with hard-veto failures on the 20% return requirement and flawless-execution risk. |

The audited classification is **Reject under the CompounderScorer diagnostic**. This does not mechanically determine the separate ER2 verdict. The original gross return bridge is mathematically sound: bear/base/bull annualized shareholder IRRs are -11.6394892779982%, 2.58089262672545%, and 12.8806934816371%. The probability-weighted gross USD IRR is 2.40068249194463%, calculated from probability-weighted terminal wealth using 25%/55%/20% scenario weights. The original base-case maximum price for a 20% gross USD IRR is USD 172.920934606481; the probability-weighted gross diagnostic is USD 171.407357976466, and the probability-weighted net-SGD diagnostic is USD 163.453343348833.

## 2. Score Reductions and Reasons

The only numerical score reduction is in Category 6. The original appendix reports 2/20 but does not disclose the six Category 6 subcategory scores. That omission prevents a clean point-by-point reconstruction. The audit assigns 0/6 to base-case IRR, 0/4 to conservative-exit-multiple hurdle clearance, 0/3 to bear-case acceptability, 0/3 to the reverse-return hurdle, 0/2 to not pricing perfection, and 1/2 to cash returns. The surviving one point recognizes that repurchases are modeled in the diluted-share paths. It does not award full credit: there is no dividend, cumulative distributions are explicitly zero, and historical

repurchases have produced only modest net share reduction despite substantial spending.

The 20% case requires terminal multiple expansion even though the selected base exit multiple does not. At the frozen 30x base exit P/E, USD 31.42001664 of terminal EPS is required. That is a 29.2113860420508% CAGR from TTM statutory diluted EPS of USD 8.723735408560312, versus modeled base terminal EPS of USD 14.342754. Holding modeled base EPS fixed would require about 65.72x at exit, well above the current 43.4229x TTM P/E. This is a major, not mild, expansion requirement for the hurdle case.

Business Quality remains 64/80. The score is already capped for standardized ROIC below 15%, uncertain maintenance-versus-growth R&D, uneven historic cash conversion, material SBC, weak buyback efficiency, short CEO-seat history, and a YELLOW moat in a new multi-platform competitive cycle. The audit found no evidence-based reason to impose an additional quality-score reduction. Importantly, preserving this score does not convert the company into a qualifying dream business under the rubric's 65/80 threshold.

## 3. Unsupported Claims

No crucial return input is unsupported. Current price, statutory diluted EPS, scenario terminal EPS, diluted-share paths, and the zero-distribution diagnostic all bind to the governed evidence chain.

One scoring presentation claim is insufficiently supported: the original 2/20 valuation score is not allocated among 6A–6F. Because the rubric is subcategory-based, the reader cannot tell whether the points were awarded for a conservative selected exit multiple, cash returns, or another test. This audit repairs that ambiguity with an explicit 1/20 allocation.

The five-year runway claim is supported by observed procedure growth, installed-base growth, recurring-revenue mix, product launches, organic R&D, and the reviewed forecast. It does not rely mainly on a management TAM assertion, so the 60% qualitative-evidence cap is not triggered. The long-duration moat claim is appropriately restrained: both the moat gate and the 2046 test remain YELLOW, and no point is awarded for low disruption risk.

## 4. Calculation Errors

The mandatory return calculations reproduce at full precision. Under the frozen P/E method, terminal equity value per share equals terminal statutory diluted EPS multiplied by the exit P/E:

| Scenario | Weight | Terminal EPS | Exit P/E | Terminal equity value/share | Distributions/share | Terminal shareholder wealth/share | Gross USD IRR |
|---|---|---|---|---|---|---|---|
| Bear | 25% | 8.501612 | 24.0x | 204.038688 | 0.000000 | 204.038688 | -11.6394892779982 % |
| Base | 55% | 14.342754 | 30.0x | 430.282620 | 0.000000 | 430.282620 | 2.58089262672545% |
| Bull | 20% | 19.284895 | 36.0x | 694.256220 | 0.000000 | 694.256220 | 12.8806934816371% |

Expected terminal shareholder wealth is USD 426.516357 per share: `0.25 × 204.038688 + 0.55 × 430.282620 + 0.20 × 694.256220`. Annualizing that wealth against USD 378.81 for exactly five years gives 2.40068249194463%. This is not an arithmetic average of scenario IRRs.

The net-SGD overlay also reproduces. Entry USD/SGD is 1.2779; terminal rates are 1.1501, 1.2140, and 1.2779; entry and exit costs are 0.35% each; withholding is 0 because distributions are zero. Entry cost basis is SGD 485.7755835465 per share. Net terminal SGD wealth is SGD 233.843567936059, SGD 520.534829827620, and SGD 884.084858455617. Resulting net-SGD IRRs are **-13.60%**, **1.39%**, and **12.72%**; the probability-weighted net-SGD IRR is **1.43%** from expected net terminal wealth of SGD 521.572020080329. Those four visible figures are rounded to exactly two decimals; full precision remains in the JSON.

One immaterial precision error existed in `compounder_score.json`: `required_eps_cagr` was 0.292113860674089. Recalculation from the artifact's own USD 31.42001664 required EPS and USD 8.723735408560312 current EPS gives 0.292113860420508. The source JSON has been corrected. The visible 29.2114% statement does not change.

## 5. Missing Data

The most important missing evidence is a governed terminal lease and senior-claim path. This prevents EV/NOPAT from controlling, but it does not impair the selected P/E method because statutory diluted EPS is reconciled. Cash and debt are therefore disclosed as context only and are not added again after EPS times P/E.

Other gaps are explicit rather than hidden: maintenance versus growth R&D is not issuer-disclosed; product-line operating margins are unavailable; pure price realization, churn, contractual escalators, and service renewals are not disclosed; the March 2026 distributor acquisition is too recent for a completed-period return test; and the package lacks a complete governed ten-year financial history. These gaps constrain confidence to Medium rather than invalidating the score.

## 6. Hard-Veto and Threshold Test Audit

The original hard-veto results are reasonable. Adjusted ROIIC appears above an ordinary cost of capital, growth does not need external financing, the balance sheet is net cash, the moat can be explained, and accounting/governance evidence does not impair trust. Watch flags remain warranted for standardized ROIC, buyback efficiency, historic FCF conversion, competitive/reimbursement/platform risks, and the unseasoned acquisition.

Hard veto 8 fails because a 20% base return requires approximately 65.72x at exit if modeled base EPS is held fixed. Hard veto 9 fails because even the modeled bull returns only 12.8807% gross USD. Threshold tests therefore fail for total score at least 80, Business Quality at least 65, valuation score at least 15, base IRR at least 20%, acceptable bear IRR, and absence of hard vetoes. The ROIIC-plus-runway subtotal of 38/45 passes. The selected scenario valuation does not use multiple expansion, but the required 20% hurdle does; the controlling threshold remains failed.

## 7. Final 20% Hurdle Pass/Fail

**FAIL.** Base gross USD IRR is 2.58089262672545%, probability-weighted gross USD IRR is 2.40068249194463%, and probability-weighted net-SGD IRR is **1.43%**. The maximum prices needed for 20% returns are less than half the current USD 378.81 price. A strong operating model does not close that valuation gap.

The primary method is P/E in every scenario, probability weighting, reverse-return diagnostic, maximum-price diagnostic, and net-SGD overlay. Terminal cash before leases is USD 8.6255B bear, USD 11.6255B base, and USD 15.1255B bull; gross debt is zero. These amounts are not included a second time in the P/E terminal values. The double-count check passes.

## 8. Dream Business / Dream Investment Classification

**Neither under the strict diagnostic thresholds.** Intuitive is a high-quality compounder candidate, but audited Business Quality is 64/80 versus the rubric's 65/80 dream-business threshold. It is not a dream investment at the current price because audited return underwriting is 1/20, the base and probability-weighted returns are low single digits, and the bear case loses capital. The single biggest reason it does not qualify is that today's price already capitalizes far more success than the five-year modeled earnings and conservative exit multiples can monetize for shareholders.

## 9. Stage 7 Scorecard Notes

Compounder Score note: **65/100 implies Reject under this diagnostic; operating quality cannot offset a 1/20 return-underwriting score and two return vetoes.**

Business Quality Score note: **64/80 reflects a strong ecosystem and attractive adjusted ROIIC, capped by sub-15% standardized ROIC, competitive durability, SBC, and weak buyback efficiency.**

20% Return UW Score note: **1/20 because base and probability-weighted gross USD IRRs are 2.58% and 2.40%; modest buyback help is the only surviving point.**

## 10. Auditor JSON

The controlling machine-readable audit is `compounder_score_audit.json`. It preserves full-precision gross USD and net-SGD returns, the frozen valuation method, scenario weights and terminal wealth, the score reconstruction, the corrected reverse-return CAGR, missing-data disclosures, and the no-authority boundaries.

# Intuitive Surgical — Red Team

Analysis date: 2026-08-08 Ticker / exchange: ISRG / XNAS TTM end: 2026-06-30 Exact horizon: 5.0 years to 2031-06-30 Current price: USD 378.81 Frozen primary method: P/E, with 24x / 30x / 36x bear / base / bull exits

This appendix assumes the Stage 5 synthesis is wrong somewhere and tries to locate the break. It uses the DR-cleared data package, reviewed consolidated-company model, management and moat appendices, and audited score and return artifacts. It does not authorize a trade, ranking, position size, message, broker instruction, or portfolio mutation.

## 1. The most fragile assumption

The most fragile operating assumption is the **12.0% five-year CAGR for Instruments and accessories in the base case**, the line that rises from TTM USD 6.598 billion to USD 11.618 billion at 2031-06-30. This is the largest product line and supplies 65.7% of base-case incremental revenue, so the consolidated forecast is not diversified away from it. The model's mechanism is continued da Vinci procedure growth, augmented modestly by Ion, SP, and mix, with instrument-life and geography acting only as partial offsets.

That mechanism is less secure than the smooth CAGR suggests. Quarterly da Vinci procedure growth slowed sequentially from 19% in Q3 2025 to 17% in Q4, 16% in Q1 2026, and 15% in Q2. The base model appropriately starts year one at 13.5%, but it still assumes that procedure-linked monetization remains sufficiently intact for Instruments growth to run 15%, 13.5%, 12%, 10.5%, and 9%. The moat appendix identifies the earliest break in exactly this profit pool: Instruments revenue growth persistently below procedure growth after mix and geography. Longer instrument lives, unfavorable procedure mix, tender pricing, competing-room utilization, or reprocessing could all create that gap before total procedures visibly stall. No clean price-only realization, instrument revenue per procedure, churn, or contract-escalator series is disclosed, so the model cannot independently verify that monetization bridge.

A two-percentage-point miss is material. If the Instruments CAGR is 10% rather than 12%, its approximate terminal revenue is USD 10.627 billion instead of the modeled USD 11.618 billion, a shortfall of USD 0.991 billion. Holding the base 33.5% operating margin, 22.5% normalized tax rate, below-line income, noncontrolling-interest deduction, and 355.489 million diluted shares fixed, that removes approximately **USD 0.72 of terminal EPS**, or 5.0% of modeled base EPS. The broader Stage 5 sensitivity, which reduces the whole-company revenue CAGR by 200 basis points, lowers EPS by USD 1.184 to USD 13.159. This is why the fragility belongs in procedure-linked revenue, not in the tax rate or share denominator.

The real downside can be worse than this one-factor calculation because revenue and margin are not independent. If Instruments under-monetizes procedures, hospitals are probably gaining bargaining power, competitors are gaining room utilization, or product mix is weakening. Those same conditions would make the modeled 33.5% margin harder to achieve. The one-factor USD 0.72 EPS loss is therefore a floor for a genuine attach-economics break, not a full bear case.

## 2. The most-likely-to-be-optimistic Stage 5 number

The single Stage 5 number most likely to be revised down is the **33.5% base-case statutory operating margin at 2031-06-30**. It is 222 basis points above the 31.28% TTM margin and assumes consolidated gross margin recovers to 68.8%, R&D holds at 13.2% of revenue, and SG&A plus other operating expense falls to 22.1%. Each leg is individually possible; achieving all three while a credible U.S. multi-platform replacement cycle develops is the optimistic part.

Management expects R&D to grow faster than SG&A over the remainder of 2026. Da Vinci 5 and Ion mix had been described as a gross-margin headwind, tariffs were expected to cost about 1% of revenue, direct distribution adds field infrastructure, and a growing operating-lease base retains utilization and residual-value risk. Service gross margin fell to 64.6% in FY2025 before recovering to 67.2% in Q2 2026. Meanwhile, the first credible U.S. challengers have crossed regulatory gates. A one-quarter 33.6% operating margin does not establish that launch, service, tariff, competition, and investment burdens normalize together for five years.

Stage 5 quantifies this exposure: a 31.5% terminal operating margin, 200 basis points below base but still above the FY2025 29.3%, reduces base EPS from USD 14.343 to USD 13.529, a USD 0.814 or 5.7% cut. Because the 30x base exit already produces only a 2.58% gross USD IRR, even modest margin disappointment materially weakens an already inadequate return case.

## 3. The strongest bear case, stated in its strongest form

The short-form bear case is that Intuitive enters its first real U.S. multi-platform replacement cycle at the same time that hospitals want lower capital intensity and greater supplier leverage. Hugo, OTTAVA, and other authorized systems do not need to displace the installed base quickly; they need only win enough incremental rooms and routine procedures to force discounts, greater usage-risk transfer, and duplicate field support. Within two to eight quarters, the first evidence would be slower da Vinci placements despite continued category growth, followed by Instruments revenue growing at least 300 basis points more slowly than da Vinci procedures and consolidated gross margin falling below its historical 66%–69% band. The damage then compounds through Systems, procedure-linked Instruments, Services, lease utilization, and operating leverage.

The reviewed bear model may still be too kind because it preserves 6.93% consolidated revenue CAGR and a 25% terminal operating margin. Even that case produces only USD 8.5016 of terminal EPS, USD 204.04 of terminal value at 24x, and a

**-11.64% gross USD annualized shareholder IRR** before SGD costs and currency. Net of the governed SGD overlay, the bear IRR is **-13.60%**. The risk is not merely that the business stops growing; it is that a still-growing company delivers a large shareholder loss because competitive normalization and multiple compression arrive together.

# 4. Cross-examination of management commentary

## Procedure outlook: confidence despite visible deceleration

On the Q2 2026 call, Dan Connolly said, **"We are maintaining our forecast to be within this range with an expectation to be closer to the midpoint."** The referenced FY2026 da Vinci procedure range was 13.5%–15.5% [data package §6, Q2 2026 call dated 2026-07-16]. This may hold for the year, but it is not proof of a five-year low-double-digit trajectory. Reported procedure growth has stepped down in every one of the latest four quarters: 19%, 17%, 16%, and 15%. The base forecast further decelerates, yet it depends on OUS and general surgery filling the gap while insurance behavior, obesity drugs, China tenders, and competing platforms remain manageable.

The first contradiction would not necessarily be a miss to the annual range. It would be procedure growth exiting 2026 below 13% while Instruments growth falls below procedure growth, showing both slower volume and weaker monetization. That would attack the USD 11.618 billion terminal Instruments line directly.

## XiR opportunity: access can dilute economics

David Rosa said, **"we believe there is a sizable long-term opportunity for our da Vinci XiR system"** [data package §6, Q4 2025 call dated 2026-01-22]. XiR can widen access, but a lower-cost refurbished platform can also cannibalize new-system demand, pressure ASP, or place more systems with customers whose procedure utilization is initially low. The package discloses no XiR revenue, unit margin, placement economics, utilization cohort, or incremental-return series. It therefore supports an access thesis, not an economic-return conclusion.

The first evidence against the claim would be Systems revenue growth lagging placements while purchased-system ASP weakens from the Q2 2026 USD 1.59 million mix-assisted level, or operating-lease revenue grows without corresponding utilization and gross-margin improvement. The model gives XiR credit for preventing a bear-case Systems decline; that floor is unproven until cohort economics season.

## Lower capex: moderation is not the same as a return

Connolly said, **"We expect capital expenditures to range between $625 million and $675 million"** [data package §6, Q3 2025 call dated 2025-10-21]. That statement followed the construction-heavy period in which capex exceeded USD 1 billion in both 2023 and 2024. A lower spend rate can help cash conversion, but it does not establish that the prior facilities earn adequate returns. FMP standardized ROIC remained 11.89%, 11.99%, and 13.71% in FY2023–FY2025, below the framework's persistent 15% screen, even though an operating-capital definition produces higher figures.

The first adverse evidence would be capex moderating while gross margin and asset turnover fail to improve, indicating unused or under-earning capacity rather than successful absorption. The Q2 2026 margin recovery is encouraging but only one quarter. A full-cycle return on the facility buildout remains unproved.

# 5. Stage 5 tie-out reverification

| Spot-check | Red-team finding | Consequence |
|---|---|---|
| Recency anchor | Correctly uses Q3 2025, derived Q4 2025, Q1 2026, and Q2 2026; TTM revenue and operating income tie exactly to USD 11.0344B and USD 3.4512B. | No arithmetic break, but the 19%→17%→16%→15% procedure trend is already decelerating. |
| Share-count path | Base USD 1.0B annual buybacks retire about 2.102M shares at USD 475.67 while annual SBC issuance is 1.740M; terminal shares fall only to 355.489M. | Mechanically plausible and below TTM FCF, but assumes repurchase price and issuance stay favorable; historical buyback efficiency is weak. |
| Product CAGR versus competition | No governed competitor revenue-deceleration series exists, so an exact peer tie cannot be claimed. Base product CAGRs are below recent company growth; bull CAGRs rely on named da Vinci 5, Ion, SP, and OUS drivers. | Arithmetic passes, but competitive outperformance remains an unverified scenario assumption rather than evidence. |

The share path is not the primary model defect. Intuitive spent about USD 5.32 billion on repurchases in 2022–2025 and another USD 1.5065 billion in H1 2026, yet FY2021-to-FY2025 diluted shares fell only 0.8%. The modeled base reduction is similarly modest—about 0.5% over five years—so it does not manufacture EPS. Its fragility is price: if shares are repurchased

above USD 475.67, USD 1 billion retires fewer shares. That would weaken the only point surviving in the 20% return-underwriting category.

Recency is mathematically clean but economically cautionary. Q1 revenue growth of 23.0% was followed by 18.5% in Q2, while procedure growth decelerated. Stage 5 does not extrapolate Q1; it fades consolidated growth from 13.9% to 8.5%. The red-team issue is that this smooth fade may understate the discontinuity of a hospital replacement cycle: placement share and pricing can reset faster than the installed-base procedure stream.

## 6. Score-derived 20% return claim most likely to be wrong

The audited diagnostic is **65/100**, comprising **64/80 Business Quality** and **1/20 Return Underwriting**. It classifies the security as Reject under that rubric: a credible franchise does not offset a return bridge that fails the base, bear, reverse-hurdle, and perfection-pricing tests.

The audited score already says the 20% case **does not clear**, and the red team agrees. At the frozen 30x base exit P/E, a 20% gross USD return requires terminal EPS of USD 31.4200, versus modeled base EPS of USD 14.3428. That is a 29.21% annual EPS CAGR from TTM statutory diluted EPS of USD 8.7237. Alternatively, holding base EPS fixed requires an exit P/E of about 65.72x, far above the current 43.42x TTM P/E. Even the bull case at 36x returns only 12.88% gross USD and 12.72% net SGD.

The score-derived claim most likely to be wrong is therefore not a positive claim but the remaining **1/20 credit for buyback help**. It can fail first because USD 1 billion per year at high repurchase prices barely outruns SBC issuance. If average repurchase price rises, SBC units remain near 1.74 million, or cash is redirected to facilities and acquisitions, the modeled 0.362 million annual net reduction disappears. The maximum base price for a 20% gross return is only USD 172.92; the probability-weighted gross and net-SGD diagnostics are USD 171.41 and USD 163.45. A lower purchase price, dramatically higher terminal EPS, or an unjustifiably larger exit multiple would have to close that gap. Current evidence supports none of those as a base case.

The audited return set is internally consistent and independently damning: gross USD IRRs are **-11.64% / 2.58% / 12.88%** in bear / base / bull, with a **2.40%** probability-weighted IRR derived from weighted terminal wealth. Net-SGD IRRs are **-13.60% / 1.39% / 12.72%**, with a **1.43%** probability-weighted IRR. Zero distributions mean there is no dividend bridge to rescue the result.

## 7. The signal that forces an exit

The force-exit signal for the research thesis is: **Instruments and accessories revenue growth trails da Vinci procedure growth by at least 300 basis points in each of the next two reported quarters.** The time window is the next two earnings releases. This is a quantitative monetization-gap test, not a generic competition warning.

The thesis depends on procedure-linked Instruments being the strongest profit-pool candidate and the majority source of incremental revenue. A sustained gap of 300 basis points would indicate that longer instrument lives, procedure mix, pricing pressure, reprocessing, or rival-room utilization is breaking the attach economics before the total installed base visibly rolls over. It would invalidate the 12% base Instruments CAGR and make the 33.5% margin expansion internally inconsistent. In governance terms, that signal forces abandonment of the current security-return thesis and a fresh forecast; it is not an instruction to transact.

## 8. Conviction at the end of red team

**Thesis does NOT survive this red team at the current price.** The operating franchise survives: the installed base, procedure-linked instruments, service footprint, regulatory capability, net cash, and ongoing innovation are real. The security-return thesis does not. Base and probability-weighted returns are low single digits, the bear destroys capital, the 20% hurdle requires either roughly double the modeled base terminal EPS or an extreme exit multiple, and both Management and Moat remain YELLOW.

The synthesis should be rewritten around a more demanding proposition: Intuitive is a strong operating company entering a newly credible multi-platform cycle, but USD 378.81 capitalizes more success than the reviewed five-year earnings paths can monetize for shareholders. The decisive monitoring question is not whether procedures continue growing. It is whether Instruments monetization and consolidated margin remain intact as competing systems win incremental rooms. Until that is proven—or the entry price changes materially—the quantified return bridge, not admiration for the franchise, controls the conclusion.

# Intuitive Surgical — Production ER2 Data Package

**Ticker:** ISRG **Run:** `pulse-cio-20260808T150358+0800` **As of:** 2026-08-08 SGT **Reporting currency and table scale:** USD; financial tables use billions unless stated otherwise. **Projection basis:** one issuer-disclosed reportable segment; exact common metric label `Income from operations`. **Sealed bridge SHA-256:** `b4b2b67ea0378b32430a371e385d3f0b10487ba53444ea90eeb7f2983638229b`.

## Source and period control

The fiscal year ends December 31. FY2025 is the latest completed fiscal year. The latest reported quarter is Q2 2026, ended 2026-06-30 and announced 2026-07-16. TTM means Q3 2025 plus Q4 2025 plus Q1 2026 plus Q2 2026, ending 2026-06-30. The exact valuation horizon supplied to downstream agents is 2031-06-30.

All quantitative FMP evidence was fetched live in this run from the stable endpoints and archived under [`raw/pulse-cio-20260808T150358+0800/d`](C:/Users/Admin/OneDrive/GPT/ER%202.0/Intuitive%20Surgical/raw/pulse-cio-20260808T150358+0800/d). The live endpoint set comprises [income statement annual](https://financialmodelingprep.com/stable/income-statement?symbol=ISRG&period=annual), [income statement quarterly](https://financialmodelingprep.com/stable/income-statement?symbol=ISRG&period=quarter), [balance sheet annual](https://financialmodelingprep.com/stable/balance-sheet-statement?symbol=ISRG&period=annual), [cash flow annual](https://financialmodelingprep.com/stable/cash-flow-statement?symbol=ISRG&period=annual), [key metrics annual](https://financialmodelingprep.com/stable/key-metrics?symbol=ISRG&period=annual), [annual product segmentation](https://financialmodelingprep.com/stable/revenue-product-segmentation?symbol=ISRG&period=annual), and [quarterly product segmentation](https://financialmodelingprep.com/stable/revenue-product-segmentation?symbol=ISRG&period=quarter). FMP is used for standardized financial history; issuer filings control where FMP conflicts with statutory presentation.

Primary official evidence was checked live against the [2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000010/isrg-20251231.htm), [Q2 2026 Form 10-Q](https://www.sec.gov/Archives/edgar/data/1035267/000103526726000058/isrg-20260630.htm), [Q2 2026 earnings release](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-second-quarter-earnings-6), [Q1 2026 earnings release](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-first-quarter-earnings-7), [Q4 2025 earnings release](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-fourth-quarter-earnings-5), and [Q3 2025 earnings release](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-third-quarter-earnings-5). Historical KPI backfill was checked live against the [2024 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526725000017/isrg-20241231.htm), [2023 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526724000021/isrg-20231231.htm), [2022 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526723000019/isrg-20221231.htm), and [2021 Form 10-K](https://www.sec.gov/Archives/edgar/data/1035267/000103526722000014/isrg-20211231.htm).

The four live FMP transcript pulls returned dates 2025-10-21, 2026-01-22, 2026-04-21, and 2026-07-16 for Q3 2025, Q4 2025, Q1 2026, and Q2 2026, respectively. All are within the expected reporting windows. The local evidence files are `fmp_transcript_2025_Q3.json`, `fmp_transcript_2025_Q4.json`, `fmp_transcript_2026_Q1.json`, and `fmp_transcript_2026_Q2.json` in the run-scoped D directory. No warehouse file was used as evidence.

## 0a. Industry classification and disclosure inventory

**Classification.** Intuitive is a U.S. GAAP medical-device and robotic-assisted surgery platform company. Economics are driven by procedure adoption, installed systems, system utilization, recurring instruments and accessories, service, and operating-lease revenue. FMP product data contains the three issuer revenue lines but is sparse on procedures, placements, installed bases, leases, da Vinci 5, Ion, geography, ASP, and regulatory milestones. The medtech and robotic-surgery ad hoc checklist is therefore mandatory.

**Official headings and search inventory.** Live filings and releases were searched for: `da Vinci procedures`, `Ion procedures`, `procedure growth`, `system placements`, `installed base`, `da Vinci 5`, `Ion`, `operating lease`, `usage-based`, `recurring revenue`, `average selling price`, `instruments and accessories`, `systems`,

`service`, `U.S.`, `OUS`, `research and development`, `capital expenditures`, `share-based compensation`, `repurchased`, `FDA clearance`, `EU MDR`, `NMPA`, `tariffs`, `Mexico`, `Germany`, `China`, `sole-sourced`, and `supply chain`.

| Dataset / table family | Official source searched | Search terms or table names | Years available | Included? | If excluded, why | Downstream relevance |
|---|---|---|---|---|---|---|
| Statutory segment economics | 2025 10-K; Q2 2026 10-Q | reportable segment; CODM; Income from operations | FY2023-FY2025; TTM bridge | Yes | None | Forecast metric identity |
| Revenue lines | 2025 10-K; quarterly releases | instruments and accessories; systems; services | FY2021-FY2025; last four quarters | Yes | None | Revenue mix and recurring economics |
| Procedure activity | 2022, 2023, 2025 10-Ks; quarterly releases | da Vinci procedures; Ion procedures | FY2021-FY2025; quarterly growth | Yes | Quarterly absolute procedure counts not consistently in releases | Demand, moat, utilization |
| Systems and installed bases | Same official set | placements; installed base; da Vinci 5; Ion | FY2021-FY2025; Q3 2025-Q2 2026 | Yes | None | Capacity and replacement cycle |
| Leasing and recurring revenue | Annual reports; Q2 2026 10-Q | fixed-payment; usage-based; operating lease; recurring revenue | FY2021-FY2025; Q2 2026 | Yes | None | Revenue durability and cash timing |
| Gross-margin and unit economics | Annual reports; Q2 2026 10-Q | product gross profit margin; service gross profit margin; ASP; utilization | FY2021-FY2025; Q2 2026 | Yes | None | Margin durability, pricing/mix, and installed-base productivity |
| Geography and ASP | Annual reports; Q2 2026 10-Q | U.S.; OUS; ASP; product mix | FY2021-FY2025; Q2 2026 | Yes | Country revenue beyond major geography is not fully disclosed | Growth mix and pricing |
| Capital and innovation | FMP statements; filings | R&D; capex; SBC; repurchases | FY2021-FY2025; H1 2026 context | Yes | None | Reinvestment and dilution |
| Regulatory and product milestones | Q2 2026 10-Q | FDA; EU MDR; NMPA; clearance; certification | Last 24 months | Yes | None | TAM enablement and launch risk |
| Tariff and supply chain | 2025 10-K; Q2 2026 10-Q and release | tariffs; Mexico; Germany; China; rare earth | Current | Yes | Exact future tariff rates remain unknowable | Gross-margin risk |

## Five-year robotic-surgery operating history

| KPI family | Granularity | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 | Latest interim | Source |
|---|---|---|---|---|---|---|---|---|
| da Vinci procedures | Global annual, thousands | 1,594 | 1,875 | 2,286 | 2,683 | 3,153 | Q2 2026 growth 15% | Official annual reports; Q2 release |
| da Vinci procedure growth | Global annual | 28% | 18% | 22% | 17% | 18% | Q2 2026 15% | Official annual reports; releases |
| Ion procedures | Global annual, thousands | 7.4 | 23.5 | 54.0 | 95.5 | 144.1 | Q2 2026 growth 36% | Official annual reports; Q2 release |
| da Vinci placements | Global systems | 1,347 | 1,264 | 1,370 | 1,526 | 1,721 | Q2 2026 468 | Official annual reports; Q2 release |
| da Vinci installed base | Period end | 6,730 | 7,544 | 8,606 | 9,902 | 11,106 | Q2 2026 11,710 | Official annual reports; Q2 release |
| da Vinci 5 placements | Global systems | N/A | N/A | N/A | 362 | 870 | Q2 2026 246 | 2025 10-K; Q2 release |
| Ion placements | Global systems | 93 | 192 | 213 | 271 | 195 | Q2 2026 55 | Official annual reports; Q2 release |
| Ion installed base | Period end | 129 | 321 | 534 | 805 | 995 | Q2 2026 1,096 | Official annual reports; Q2 release |
| U.S. revenue share | Percent | 67% | 67% | 66% | 67% | 68% | H1 2026 not separately tabulated here | Official annual reports |

The FY2023 Ion procedure count is reported as approximately 54,000 in the 2023 10-K, while the later 2025 10-K comparison uses approximately 53,800. This is a disclosed rounding refinement, not a taxonomy change. The table retains the contemporaneous rounded 54,000; downstream calculations requiring precision should use 53,800.

## Gross-margin and unit-economic history

| KPI | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 | Q2 2026 | Source / definition |
|---|---|---|---|---|---|---|---|
| GAAP consolidated gross margin | 69.3% | 67.4% | 66.4% | 67.5% | 66.0% | 67.8% | Official annual reports; Q2 2026 10-Q |
| GAAP product gross profit margin | 69.5% | 67.3% | 65.7% | 67.2% | 66.3% | 67.9% | Instruments and systems product revenue and cost |
| GAAP service gross profit margin | 68.6% | 68.2% | 69.8% | 69.0% | 64.6% | 67.2% | Official service gross-profit disclosures |
| Purchased da Vinci system ASP, $M | 1.55 | 1.49 | 1.42 | 1.50 | 1.60 | 1.59 | Excludes operating leases and Ion; FY2024 onward also excludes specified-price trade-in-right effects |
| da Vinci system utilization growth | 17% | 4% | 9% | 2% | 3% | 3% | Procedures per system per year versus comparable prior period |

ASP is a combined product, geography, pricing, foreign-exchange, and trade-in-mix indicator rather than a pure price series. The Q2 2026 margins are calculated directly from the official product/service revenue and cost rows; the annual margins are issuer-disclosed.

### Lease and recurring-revenue history

| KPI | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 | Q2 2026 / H1 2026 | Official definition or note |
|---|---|---|---|---|---|---|---|
| da Vinci operating-lease placements | 517 | 492 | 659 | 776 | 872 | Q2 254 | Includes fixed-payment and usage-based |
| da Vinci usage-based placements | 184 | 216 | 355 | 467 | 496 | Q2 131 | Revenue recognized as procedures occur |
| Operating lease revenue, $M | 276.9 | 376.5 | 500.5 | 654.2 | 874.3 | H1 512.0 | Includes Ion contribution |
| Variable usage-based lease revenue, $M | 78 | 133 | 217 | 338 | 531 | H1 326 | Primarily usage-based arrangements |
| Total recurring revenue, $M | 4,293.6 | 4,918.6 | 5,944.9 | 7,040.3 | 8,465.3 | H1 4,839.4 | Instruments, service, operating lease |
| Recurring revenue / total | 75% | 79% | 83% | 84% | 84% | H1 85% | Issuer operating measure |
| da Vinci operating-lease installed base | 1,294 | 1,683 | 2,227 | 2,799 | 3,210 | Q2 3,425 | Customer systems under operating leases |
| Ion operating-lease installed base | 61 | 132 | 214 | 319 | 360 | Q2 397 | Customer systems under operating leases |

Economic interpretation is mechanical, not promotional. Sales and sales-type leases recognize system revenue up front. Fixed-payment operating leases recognize revenue over time, and usage-based arrangements recognize revenue with system use. The 2025 10-K says lease pricing is generally set at a modest premium to purchases, but usage-based arrangements can be cancelled and may not recover the system cost if utilization disappoints. This creates durable recurring revenue while shifting utilization and residual-value risk to Intuitive.

## 1. Reporting structure and taxonomy

Intuitive manages business activities on a consolidated basis and operates in **one reportable segment**. FY2025 segment revenue was $10.0647 billion, or 100% of total revenue. The CODM reviews budget versus actual results using the exact issuer-disclosed performance measure `Income from operations`; this is the sealed financial-projection basis. Revenue lines and technology platforms are business context, not separate reportable segments.

Reporting structure is stable over the last three years. No segment realignment, restatement, or 8-K taxonomy change was identified. The annual revenue taxonomy remains instruments and accessories, systems, and services. A one-time FMP FY2022 `Product` aggregate duplicates the instruments-plus-systems sum and is excluded to prevent double counting. The

official filing lines control.

Geographically, domestic revenue represented 66%, 67%, and 68% in FY2023, FY2024, and FY2025; OUS represented 34%, 33%, and 32%. FY2021 and FY2022 were each 67% U.S. and 33% OUS. Q2 2026 procedure growth was 12% in the U.S. and 20% OUS. The Q2 10-Q attributes particular OUS strength to India, Italy, and the United Kingdom. This is a geography indicator, not a reportable-segment split.

## 2. Consolidated historicals

| Metric | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 | Source |
|---|---|---|---|---|---|---|
| Revenue, $B | 5.710 | 6.222 | 7.124 | 8.352 | 10.065 | Live FMP income statement; 10-K tie |
| Income from operations, $B | 1.821 | 1.577 | 1.767 | 2.349 | 2.946 | Live FMP income statement; filing |
| Operating margin | 31.9% | 25.3% | 24.8% | 28.1% | 29.3% | Calculated |
| Net income attributable to Intuitive, $B | 1.705 | 1.322 | 1.798 | 2.323 | 2.856 | Live FMP income statement; filing |
| Diluted EPS, $ | 4.66 | 3.65 | 5.03 | 6.42 | 7.87 | Live FMP income statement |
| Diluted shares, M | 365.8 | 362.0 | 357.4 | 362.0 | 362.7 | Live FMP income statement |
| Capex, $B | 0.354 | 0.532 | 1.064 | 1.111 | 0.540 | Live FMP cash flow; cash outflow shown positive |
| Free cash flow, $B | 1.736 | 0.958 | 0.750 | 1.304 | 2.491 | Live FMP cash flow; OCF less capex |
| Analytical ROIC | 27.1% | 18.0% | 21.8% | 20.0% | 21.1% | Calculation below |
| FMP standardized ROIC | 13.4% | 11.4% | 11.9% | 12.0% | 13.7% | Live FMP key metrics |

**ROIC calculation.** Analytical NOPAT equals `Income from operations × (1 − effective cash-book tax rate)`. Effective tax rate equals reported income-tax expense divided by pretax income. Invested capital equals stockholders' equity plus official gross borrowings minus cash and equivalents minus short-term investments; average invested capital uses beginning and ending balances. Official gross borrowings were zero for FY2025; FMP's $302.8 million `totalDebt` is a sales-type lease receivable misclassification and is not used.

| ROIC component | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 |
|---|---|---|---|---|---|
| Effective tax rate | 8.6% | 16.3% | 7.2% | 12.6% | 13.1% |
| NOPAT, $B | 1.665 | 1.320 | 1.639 | 2.053 | 2.559 |
| Average invested capital, $B | 6.154 | 7.320 | 7.502 | 10.252 | 12.155 |
| NOPAT / average invested capital | 27.1% | 18.0% | 21.8% | 20.0% | 21.1% |

Low reported tax rates include excess tax benefits from employee equity awards, so the analytical ROIC series is sensitive to tax normalization. FMP standardized ROIC is retained beside the transparent calculation because it uses its own standardized denominator. Downstream forecasting should not treat the two definitions as interchangeable.

## 3. Segment historicals

### Consolidated company — sole reportable segment

| Consolidated company | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 | Source |
|---|---|---|---|---|---|---|
| Revenue, $B | 5.710 | 6.222 | 7.124 | 8.352 | 10.065 | FMP; official revenue lines |
| YoY growth | 31.0% | 9.0% | 14.5% | 17.2% | 20.5% | Calculated |
| Income from operations, $B | 1.821 | 1.577 | 1.767 | 2.349 | 2.946 | FMP; issuer-disclosed exact metric |
| Margin on Income from operations | 31.9% | 25.3% | 24.8% | 28.1% | 29.3% | Calculated |

This is not the permitted single-segment consolidated fallback. The basis is `issuer_disclosed`; fallback is ineligible because the issuer explicitly discloses the metric. Product revenue lines map into this sole reportable segment and do not

have separately disclosed product operating profit.

## 3a. Historical statutory-profit bridge and forecast-driver ledger

**Exact common segment profit basis:** `Income from operations`. **Segment profit basis:** `issuer_disclosed`. **Modeled segment count:** 1. **Currency and scale:** USD millions. **Sealed statutory packet hash:** `b4b2b67ea0378b32430a371e385d3f0b10487ba53444ea90eeb7f2983638229b`.

| Source ID | Controlling period use | Archived raw path | SHA-256 |
|---|---|---|---|
| SEC_2025_10K | FY2025 bridge | C:\Users\Admin\OneDrive\GPT\ER 2.0\Intuitive Surgical\raw\pulse-cio-20260808T150358+0800\sec_ISRG_2025_10K.htm | 71fc0975ef819c16142d85614e92112e513445a24e4b808775607063f960c593 |
| SEC_2026_Q2_10Q | Q2 2026 and H1 2026 source facts | C:\Users\Admin\OneDrive\GPT\ER 2.0\Intuitive Surgical\raw\pulse-cio-20260808T150358+0800\sec_ISRG_2026Q2_10Q.htm | 823e944ee199fad85e2497e27c752fbe26b164114c818207c9c0f0fb134af8d3 |
| SEC_2026_Q1_10Q | Q1 2026 source facts | C:\Users\Admin\OneDrive\GPT\ER 2.0\Intuitive Surgical\raw\pulse-cio-20260808T150358+0800\sec_ISRG_2026Q1_10Q.htm | ddd58099c2ff7bd749abd51c1cee1e61a50337efd701a536659fbc9e5411f963 |
| SEC_2025_Q3_10Q | Q3 2025 and 9M 2025 source facts | C:\Users\Admin\OneDrive\GPT\ER 2.0\Intuitive Surgical\raw\pulse-cio-20260808T150358+0800\sec_ISRG_2025Q3_10Q.htm | 18c16b775265a84351e3c9b52607fb880a97074895927b160d3d82e35b392583 |
| TTM_RECON | Q3 2025 + derived Q4 2025 + Q1 2026 + Q2 2026 | C:\Users\Admin\OneDrive\GPT\ER 2.0\Intuitive Surgical\raw\pulse-cio-20260808T150358+0800\ttm_statutory_reconciliation.json | 5550211a7424364d320dfc85fbc5fe4b95e8e58b2304b247be3ec34b826f358a |

### FY2025 statutory bridge

| Bridge line | Classification | Value, $M | Source ID | Running subtotal, $M |
|---|---|---|---|---|
| Consolidated company | segment profit | 2,945.5 | SEC_2025_10K | 2,945.5 |
| Sum of reportable segment profit | segment profit sum | 2,945.5 | SEC_2025_10K | 2,945.5 |
| Consolidated segment profit metric | subtotal | 2,945.5 | SEC_2025_10K | 2,945.5 |
| Statutory operating income | statutory subtotal | 2,945.5 | SEC_2025_10K | 2,945.5 |
| Interest and other income, net | other_non_operating | 365.9 | SEC_2025_10K | 3,311.4 |
| Pretax income | statutory subtotal | 3,311.4 | SEC_2025_10K | 3,311.4 |
| Income tax expense | tax | -434.8 | SEC_2025_10K | 2,876.6 |
| Less: net income attributable to noncontrolling interest in joint venture | noncontrolling_interests | -20.6 | SEC_2025_10K | 2,856.0 |
| Net income | statutory subtotal | 2,856.0 | SEC_2025_10K | 2,856.0 |

There are no corporate/unallocated adjustments and no operating bridge adjustments in the sealed packet. No zero placeholders have been inserted. All five FY2025 reconciliation residuals are $0.0 million; tolerance is $1.6557 million.

### TTM ended 2026-06-30 statutory bridge

| Bridge line | Classification | Value, $M | Source ID | Running subtotal, $M |
|---|---|---|---|---|
| Consolidated company | segment profit | 3,451.2 | TTM_RECON | 3,451.2 |
| Sum of reportable segment profit | segment profit sum | 3,451.2 | TTM_RECON | 3,451.2 |
| Consolidated segment profit metric | subtotal | 3,451.2 | TTM_RECON | 3,451.2 |
| Statutory operating income | statutory subtotal | 3,451.2 | TTM_RECON | 3,451.2 |
| Interest and other income, net | other_non_operating | 354.6 | TTM_RECON | 3,805.8 |

| Bridge line | Classification | Value, $M | Source ID | Running subtotal, $M |
|---|---|---|---|---|
| Pretax income | statutory subtotal | 3,805.8 | TTM_RECON | 3,805.8 |
| Income tax expense | tax | -647.9 | TTM_RECON | 3,157.9 |
| Less: net income attributable to noncontrolling interest in joint venture | noncontrolling_interests | -19.1 | TTM_RECON | 3,138.8 |
| Net income | statutory subtotal | 3,138.8 | TTM_RECON | 3,138.8 |

TTM is exactly Q3 2025 plus Q4 2025 plus Q1 2026 plus Q2 2026. It also reconciles as FY2025 less H1 2025 plus H1 2026. All five TTM reconciliation residuals are $0.0 million; tolerance is $1.9029 million. The label `Net income` is reproduced exactly from the sealed packet, while the final amount is attributable after the explicitly shown NCI deduction.

### Forecast-driver schedule

| Historical bridge line | FY2025, $M | TTM, $M | Forecast treatment | Driver and source | Bear / base / bull rule |
|---|---|---|---|---|---|
| Income from operations | 2,945.5 | 3,451.2 | Independently forecast exact segment metric | Revenue lines, procedure activity, gross margin, R&D and SG&A; official filings | Scenario revenue and margin assumptions; no relabeling |
| Interest and other income, net | 365.9 | 354.6 | Cash and yield schedule | Cash plus investments and management other-income outlook | Bear lower cash/yield; base normalized cash/yield; bull higher cash generation |
| Income tax expense | -434.8 | -647.9 | Tax-rate schedule | Statutory effective rate; management 2026 non-GAAP 22%-23% context | Bear higher normalized rate; base midrange; bull lower rate without assuming excess-tax windfalls |
| Less: net income attributable to noncontrolling interest in joint venture | -20.6 | -19.1 | Percentage of relevant JV earnings with conservative floor | Historical sealed line and China joint-venture structure | Bear larger deduction; base historical ratio; bull smaller positive deduction, never an unsupported gain |

STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING

## 4. Product and sub-segment historicals

The issuer separately discloses three revenue lines in dollars. It does not separately disclose da Vinci versus Ion revenue or product-level operating profit. Procedures and systems are operational product KPIs, not dollar-disclosed revenue subsegments.

| Segment | Product / revenue line | What it is | Dollar disclosure? | FY2023 / FY2024 / FY2025 revenue and source |
|---|---|---|---|---|
| Consolidated company | Instruments and accessories | Procedure-linked consumables and tools | Yes | $4.277B / $5.079B / $6.019B; 2025 10-K and live FMP |
| Consolidated company | Systems | Sales, sales-type leases, operating leases, and buyouts | Yes | $1.680B / $1.966B / $2.474B; 2025 10-K and live FMP |
| Consolidated company | Services | System service contracts and support | Yes | $1.168B / $1.307B / $1.572B; 2025 10-K and live FMP |
| Consolidated company | da Vinci platform | Multi-port and single-port robotic surgery ecosystem | No separate platform revenue | Operational procedures, placements, base, and mix only |
| Consolidated company | Ion platform | Robotic-assisted endoluminal lung-biopsy platform | No separate platform revenue | Operational procedures, placements, and base only |
| Consolidated company | Digital and learning | Analytics, training, telepresence, workflow products | No material separate revenue | 2023 10-K says revenue was not material at that time |

### Five-year disclosed revenue-line history

| Revenue line, $B | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 | FY2021-FY2025 CAGR (4 years) |
|---|---|---|---|---|---|---|
| Instruments and accessories | 3.101 | 3.518 | 4.277 | 5.079 | 6.019 | 18.0% |
| Systems | 1.693 | 1.680 | 1.680 | 1.966 | 2.474 | 9.9% |
| Services | 0.916 | 1.024 | 1.168 | 1.307 | 1.572 | 14.4% |
| Total | 5.710 | 6.222 | 7.124 | 8.352 | 10.065 | 15.2% |

No back-solved dollar rows are used. The three official lines sum exactly to consolidated revenue in each year. `Da Vinci 5 mix` means 870 of 1,721 da Vinci placements in FY2025, or 50.6%, versus 362 of 1,526 in FY2024, or 23.7%. Q2 2026 mix was 246 of 468 placements, or 52.6%. These are placement mixes, not revenue mixes.

## 5. Most recent quarterly trend

*Intuitive FY ends December 31. Most recently completed fiscal quarter at time of writing: FY2026 Q2, covering April-June 2026, reported on 2026-07-16 via the [official Q2 release](https://isrg.intuitive.com/news-releases/news-release-details/intuitive-announces-second-quarter-earnings-6).*

### Consolidated company

| Quarter | Revenue, $B | YoY | Income from operations, $B | Operating margin | Source release date |
|---|---|---|---|---|---|
| Q3 2025 | 2.505 | 22.9% | 0.760 | 30.3% | 2025-10-21 |
| Q4 2025 | 2.866 | 18.8% | 0.864 | 30.2% | 2026-01-22 |
| Q1 2026 | 2.771 | 23.0% | 0.855 | 30.9% | 2026-04-21 |
| Q2 2026 | 2.892 | 18.5% | 0.972 | 33.6% | 2026-07-16 |

### Disclosed revenue lines

| Quarter | Instruments and accessories, $B / YoY | Systems, $B / YoY | Services, $B / YoY | Product operating margin |
|---|---|---|---|---|
| Q3 2025 | 1.519 / 20.1% | 0.590 / 32.7% | 0.396 / 20.4% | True non-disclosure |
| Q4 2025 | 1.658 / 17.5% | 0.786 / 20.1% | 0.422 / 21.5% | True non-disclosure |
| Q1 2026 | 1.686 / 23.3% | 0.651 / 24.5% | 0.434 / 19.5% | True non-disclosure |
| Q2 2026 | 1.735 / 17.7% | 0.685 / 19.2% | 0.472 / 20.8% | True non-disclosure |

### Platform KPI trend

| Quarter | da Vinci procedure growth | Ion procedure growth | da Vinci placements / da Vinci 5 | Ion placements | da Vinci base / Ion base | Operating-lease / usage-based da Vinci placements |
|---|---|---|---|---|---|---|
| Q3 2025 | 19% | 52% | 427 / 240 | 50 | 10,763 / 954 | 231 / 115 |
| Q4 2025 | 17% | 44% | 532 / 303 | 42 | 11,106 / 995 | 250 / 150 |
| Q1 2026 | 16% | 39% | 431 / 232 | 52 | 11,395 / 1,041 | 243 / 118 |
| Q2 2026 | 15% | 36% | 468 / 246 | 55 | 11,710 / 1,096 | 254 / 131 |

Q2 2026 recurring revenue was $2.469 billion, 85% of revenue. Operating lease revenue was $261.8 million, including $169 million of variable lease revenue. The da Vinci purchased-system ASP was approximately $1.59 million versus $1.50 million a year earlier; management attributed the increase primarily to favorable product mix including da Vinci 5, partly offset by geography.

## 6. Management commentary on forward growth

Quote selection is intentionally bounded to four load-bearing forward statements. All quotes were found verbatim in live FMP transcript pulls in this run, and each transcript date was verified. The outlook table captures additional guidance as issuer data without turning every guidance line into a quote.

### Verbatim forward quotes

| Fiscal period / call date | Speaker | Verbatim quote | Topic | Modeling interpretation |
|---|---|---|---|---|
| Q3 2025 / 2025-10-21 | Dan Connolly, VP Investor Relations | “We expect capital expenditures to range between $625 million and $675 million” | Capex | FY2025 construction-heavy capex was expected to moderate after facility buildout |
| Q4 2025 / 2026-01-22 | David Rosa, CEO | “we believe there is a sizable long-term opportunity for our da Vinci XiR system” | Access and refurbished systems | A lower-cost refurbished platform can widen OUS and ambulatory access |

| Fiscal period / call date | Speaker | Verbatim quote | Topic | Modeling interpretation |
|---|---|---|---|---|
| Q1 2026 / 2026-04-21 | Dan Connolly, VP Investor Relations | “We are increasing our forecast and now expect full year da Vinci procedure growth within a range of 13.5% to 15.5%.” | Procedure guidance | The annual procedure range was raised after Q1 strength |
| Q2 2026 / 2026-07-16 | Dan Connolly, VP Investor Relations | “We are maintaining our forecast to be within this range with an expectation to be closer to the midpoint.” | Procedure guidance | Q2 moderation did not break the annual range, but midpoint replaced upside framing |

### Guidance progression and strategic anchors

| Call date | Procedure outlook | Non-GAAP gross-margin outlook | Non-GAAP opex outlook | Other material forward evidence |
|---|---|---|---|---|
| 2025-10-21 | FY2025 da Vinci 17%-17.5% | 67%-67.5%; tariff impact 70 bps plus or minus 10 bps | 11%-13% | FY2025 capex $625M-$675M |
| 2026-01-22 | FY2026 da Vinci 13%-15% | 67%-68%; tariff impact 1.2% of revenue plus or minus 10 bps | 11%-15% | Newer da Vinci 5 and Ion mix was a gross-margin headwind |
| 2026-04-21 | FY2026 da Vinci 13.5%-15.5% | 67.5%-68.5%; tariff impact 1.0% | 11%-14% | Input cost exposure includes freight and semiconductor memory |
| 2026-07-16 | FY2026 da Vinci 13.5%-15.5%, nearer midpoint | 68%-69%; tariff impact 1.0% | 11%-13% | R&D expected to grow faster than SG&A over the rest of 2026 |

Q2 procedure drivers remain U.S. general surgery, including after-hours cases, and OUS procedures outside urology. Risks embedded in management's range include U.S. insurance coverage and patient behavior, China tenders and local competition, European capital pressure, Japan capital recovery, and obesity drugs. The forecast should not extrapolate Q1's 23% revenue growth as a durable procedure rate.

## 7. Capital allocation history

| Year | Capex, $B | Capex / revenue | R&D, $B | R&D / revenue | Buybacks, $B | Dividends, $B | M&A cash use, $B | Source |
|---|---|---|---|---|---|---|---|---|
| FY2021 | 0.354 | 6.2% | 0.671 | 11.8% | 0.000 | 0.000 | 0.009 | Live FMP statements |
| FY2022 | 0.532 | 8.6% | 0.879 | 14.1% | 2.607 | 0.000 | 0.013 | Live FMP statements |
| FY2023 | 1.064 | 14.9% | 0.999 | 14.0% | 0.416 | 0.000 | 0.009 | Live FMP statements |
| FY2024 | 1.111 | 13.3% | 1.145 | 13.7% | 0.000 | 0.000 | 0.001 | Live FMP statements |
| FY2025 | 0.540 | 5.4% | 1.312 | 13.0% | 2.295 | 0.000 | 0.014 | Live FMP statements; 10-K |

Share-based compensation rose from $449 million in FY2021 to $788 million in FY2025. Diluted weighted-average shares moved from 365.8 million to 362.7 million over the same period; repurchases therefore more than offset net issuance over the five-year endpoints, although the annual series is not monotonic. In H1 2026, the company repurchased 3.2 million shares for $1.5065 billion at an average $475.67 per share. Q2 alone was 0.9 million shares for $379 million.

R&D is a recurring operating expense, not an add-back. Q2 2026 R&D was $370.6 million, up 18% YoY, and H1 R&D was $732.5 million, up 16%. Projects cover multi-port, Ion, SP, digital products and services, and other research. The company expects substantial R&D investment to continue.

## 8. Balance sheet snapshot

| Item at FY2025 | $B | Source |
|---|---|---|
| Cash and equivalents | 3.368 | Live FMP; 2025 10-K |
| Short-term investments | 2.567 | Live FMP; 2025 10-K |
| Long-term investments | 3.299 | Live FMP; 2025 10-K |
| Total debt, current plus long-term | 0.000 | Official filing controls |

| Item at FY2025 | $B | Source |
|---|---|---|
| Net debt using cash plus short-term investments | -5.935 | Calculated |
| Net debt / EBITDA | -1.49x | Calculated on FY2025 FMP EBITDA $3.989B |
| Goodwill plus definite-lived intangibles | 0.381 | Live FMP balance sheet |
| Tangible book value | 17.443 | Equity $17.824B less goodwill and intangibles |

At Q2 2026, cash plus short- and long-term investments totaled $8.6255 billion. The March 2026 distributor acquisition increased goodwill to $580.6 million and net definite-lived intangible assets to $192.0 million by June 30. The company still has substantial net cash capacity, but buybacks and the acquisition reduced average cash balances and therefore other income.

## 9. Recent corporate actions and operating exposures

- **2026-03-01 — direct-distribution acquisition.** Intuitive acquired the da Vinci and Ion distribution businesses operated by ab medica, Abex, Excelencia Robótica, and affiliates for approximately $533.1 million in cash, net of settlement of $32.6 million of receivables. It assumed direct distribution in Italy, Spain, Portugal, Malta, San Marino, and associated territories. Source: Q2 2026 10-Q Note 7.
- **2026 H1 — repurchases.** The company repurchased 3.2 million shares for $1.5065 billion; Q2 repurchases were 0.9 million shares for $379 million. Source: Q2 2026 10-Q.
- **2026-01 — da Vinci 5 cardiac clearance.** FDA cleared selected thoracoscopically-assisted cardiac procedures using non-force-feedback instruments. In March 2026, FDA also cleared extended lives for updated force-feedback instruments. Source: Q2 2026 10-Q product section.
- **2026-04 — China energy clearance.** NMPA approved the E-200 generator in China. Ion software incorporating AI across the navigation workflow had received FDA clearance in October 2025. Source: Q2 2026 10-Q.
- **2025-07 onward — international da Vinci 5.** EU MDR certification arrived in July 2025, following Japan clearance in June 2025. By Q2 2026, 1,710 da Vinci 5 systems were installed, including 136 OUS. Source: Q2 2026 10-Q.
- **Tariffs and supply chain.** Intuitive manufactures a significant majority of instruments and accessories in Mexicali, Mexico; most qualify under USMCA. A majority of endoscopes are manufactured in Germany, and certain materials and China-local Xi subassemblies cross tariff borders. Q2 2026 recognized $20.8 million of tariffs and other trade measures in cost of revenue and $35.9 million of IEEPA tariff refunds. Rare-earth export restrictions and sole- or single-source suppliers remain continuity risks. Source: Q2 2026 10-Q and earnings release.
- **Pricing and mix.** Q2 2026 purchased-system ASP was $1.59 million versus $1.50 million, helped by da Vinci 5 mix. However, ASP varies with product, geography, trade-ins, pricing, and FX; no clean price-only series is disclosed.

## 10. Open data gaps and provenance flags

| Gap classification | Item | Exact search performed | Consequence |
|---|---|---|---|
| True non-disclosure | da Vinci versus Ion revenue dollars and profit | 2025 10-K, Q2 2026 10-Q, four releases; searched platform revenue, da Vinci revenue, Ion revenue, segment profit | Use the three official revenue lines and one-segment Income from operations only |
| True non-disclosure | Product-line operating margins | Same official set; searched product margin, systems margin, instruments margin, service operating margin | Do not invent product profit; only product and service gross margins are sometimes disclosed |
| True non-disclosure | Quarterly absolute procedure volumes in every release | Four releases and transcripts; searched procedure volume and procedures | Use disclosed quarterly growth rates; absolute annual histories remain official |
| True non-disclosure | Country-by-country revenue | 2025 10-K and Q2 2026 10-Q; searched geographic revenue, country, U.S., OUS | Use U.S./OUS revenue share and country procedure commentary |
| True non-disclosure | Pure price-versus-mix bridge for ASP | Annual reports, Q2 10-Q, transcripts; searched ASP, pricing, trade-in, mix | Treat ASP changes as combined price/mix/geography evidence |
| Estimated | Analytical ROIC | Built from live FMP statements using stated NOPAT and average-capital formula | Use definition consistently and retain FMP standardized ROIC comparator |

| Gap classification | Item | Exact search performed | Consequence |
|---|---|---|---|
| Not applicable | Dividend history | FMP cash flow and filings show no common dividend in the five-year period | Dividend contribution is zero unless policy changes |
| True non-disclosure | Current formal investor-day or capital-markets-day transcript | Official IR events and presentations pages plus web search; searched Investor Day and Capital Markets Day; no current event or transcript was identified | Forward evidence therefore relies on the latest four earnings calls and filings |

There is no open statutory-bridge gap. The sealed bridge is reproduced without reclassification, plug, fallback, or unsupported line. The mandatory disclosure inventory is complete enough for downstream segment, management, moat, and synthesis work. Any forecast of da Vinci, Ion, or da Vinci 5 dollar revenue must remain an analyst allocation clearly labeled as such; it is not historical issuer disclosure.

## Load-bearing verification record

- **Largest disclosed revenue line, latest quarter.** The official Q2 2026 release reports instruments and accessories revenue of $1.7349 billion, up approximately 18%, matching the live FMP quarterly product pull.
- **Forward quote.** The Q2 2026 FMP transcript returned date 2026-07-16 and contains Daniel Connally's exact midpoint statement reproduced in Section 6.
- **Latest full-year revenue.** The live FMP annual income statement returned FY2025 revenue of $10.0647 billion, matching the 2025 10-K and the exact sum of $6.0189 billion instruments and accessories, $2.4737 billion systems, and $1.5721 billion services.
- **Statutory bridge integrity.** The byte hash recomputed in this run equals the QFR-sealed SHA-256. FY2025 and TTM residuals are all zero within their sealed tolerances.