BUSINESS & MARKET DUE-DILIGENCE

The Blade, Not the *Razor*

How CLASSYS turned an installed base of HIFU and RF devices into a ~46%-recurring, 50%-margin consumables annuity — and what a consulting acquirer must underwrite to own it.

KOSDAQ 214150 · CLASSYS Inc.

FY2025 revenue	Operating margin	Recurring (consumables)	Installed base
₩336.8bn	50.7%	~46%	>35,000

Prepared for a consulting firm supporting M&A / investment due-diligence on CLASSYS and the aesthetic energy-device sector. This is a business-analysis and market-research brief, not an equity research note: it contains no price target and treats sell-side targets only as third-party sentiment.

Evidence base · DART annual report 2025.12 (rcept 20260323001541) + 5-yr structured consolidated financials, 22 DART filings, 83 sell-side reports (2018–2026), KRX 1-yr panel, 106 news items, SEC EDGAR (InMode, Cutera), and adversarially-verified market research. Figures cited inline to source. · Seoul · 2026-06-02

Contents

NINE SECTIONS · ~29 PAGES

The monograph is built around a single analytical spine — the **razor-and-blade model**: a growing installed base of energy-based devices (the razor) that meters proprietary single-use cartridges and tips (the blade) into a high-margin, recurring annuity. Every section — five-year history, products, market, competition, and the forward view — is read through that lens and the unit economics it implies.

HOW TO READ THIS DOCUMENT

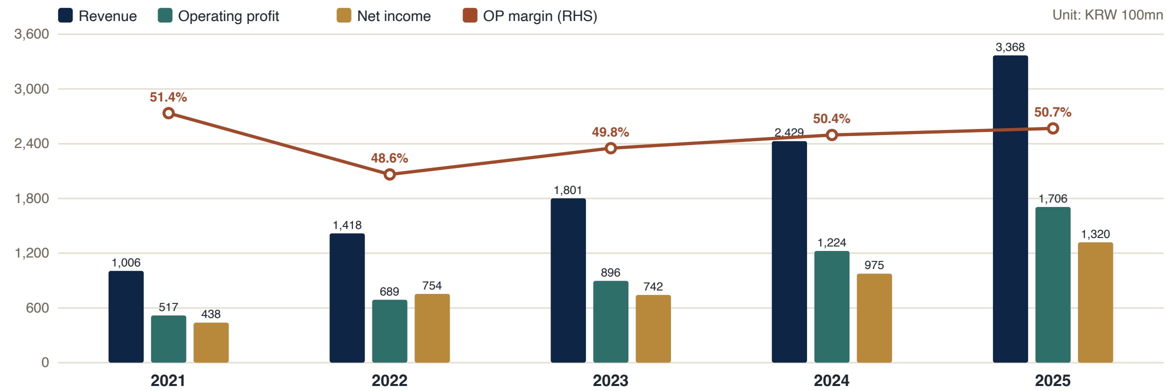
The number that matters most is not the 38% revenue growth — it is the **~50% operating margin held flat while revenue tripled**. A pure hardware maker cannot do that. The thesis of this report is that CLASSYS is a consumables-annuity business wearing a device-maker's clothing, and that the diligence question is the *durability of the blade*, not the size of the razor.

— Executive Summary

THE THESIS

CLASSYS Inc. (KOSDAQ 214150) is the largest independent, listed, profitable, HIFU-led pure-play in the global aesthetic energy-device industry. In FY2025 it generated **₩336.8 bn of revenue (+38.6% YoY)** at a **50.7% operating margin** and ₩132.0 bn of net income DART 20260323001541. Those two numbers do not normally coexist: 38% growth usually comes with margin sacrifice, and 50% operating margins usually belong to slow-growing monopolies. CLASSYS sustains both because it is not, at its core, a device manufacturer — it is a **consumables-annuity business** that uses devices as the metering mechanism.

Five years of compounding: revenue tripled while operating margin never left the ~50% band



Source: DART 20260323001541 (annual report 2025.12), 5-yr consolidated financial statements (fnlttSinglAcnt CFS). OP margin on right-hand 40–55% scale.

The mechanism is the **razor-and-blade model**. CLASSYS places a HIFU or RF device into a clinic; the device only operates with proprietary single-use cartridges (HIFU) or tips (RF) that are metered by shot count and must be re-ordered. As the installed base grows and procedure volumes compound, consumable revenue accumulates as a sticky, high-margin annuity. In FY2025 the model is no longer a thesis to be inferred from margins — it is disclosed directly in the filing: **device 51.7% / consumables 45.9% / other 2.4%** of revenue, with consumables growing +36.9% YoY, nearly in step with the device line DART 20260323001541, brand-level operating results.

THE ONE-SENTENCE THESIS

CLASSYS converts one-time hardware sales into a multi-year, ~46%-recurring consumables annuity off a >35,000-unit global installed base; that annuity — not the device cycle — is what produces a ~50% operating margin, and it is the single asset an acquirer is really buying. The peers that lacked a deep blade (InMode, Cutera) saw revenue and margin collapse when the device cycle turned; CLASSYS's blade is the reason it did not.

The same diligence lens immediately surfaces the tensions. Ownership is a **Bain Capital control structure** in a partial-exit sequence, with the sponsor's stake 100%-pledged and a full re-sale reportedly *suspended over price* Newsis, 2026-05-25. And the first crack in the margin record appeared in **Q1 2026**, when operating margin compressed to 42.7% DART 20260515001293. Both are addressed in full below; neither, on the evidence, breaks the thesis — but both define the deal.

Five findings a diligence team should anchor on

1 **The margin is the moat, and it is structural.** Gross margin held in a 76–79% band and operating margin at 49–51% across five years while revenue rose +235% DART 20260323001541. Cash conversion (CFO ÷ net income) crossed 1.0x in FY2024–25, reaching 1.24x — cash now outruns accounting earnings, the fingerprint of a maturing consumables annuity rather than a one-off device boom.

2 **The blade is ~46% of revenue and compounding.** Consumables reached ₩154.6 bn (45.9% of sales) in FY2025, +36.9% YoY DART 20260323001541. Among listed peers this recurring share is best-in-class — roughly double InMode's ~22% — and is the variable that insulates earnings through a capital-equipment downcycle.

3 **The competitive set validates the model by failing without it.** InMode (~22% recurring) saw revenue fall from a $492m peak (FY2023) to $370m (FY2025), operating margin from a 46.8% peak to 23.0% EDGAR INMD; Cutera (~54% device-grade gross margin, single-bet AviClear) lost 36 points of gross margin in one year and exited via Chapter 11 in March 2025 EDGAR CUTR. CLASSYS is the inverse on every axis.

4 **The growth runway is geographic and is being built directly.** Export is 66.7% of revenue across ~80 countries; CLASSYS is converting from distribution to direct subsidiaries (Japan, and a 77.5% acquisition of its Brazilian distributor closed March 2026), and has a US/China product pipeline (Quadessy launched US Mar-2026; Volnewmer NMPA targeted late-2026/2027; Ultraformer MPT US 2027) DART; sell-side; news.

5 **The risks are ownership- and concentration-shaped, not operational.** Bain's stake is 100%-pledged and in a partial-exit; one China major customer went from ₩46.9bn (FY2024) to ₩0 (FY2025); and Q1 2026 margin compressed ~760bps on Brazil-integration one-offs and soft consumables DART. These are diligenceable, not disqualifying.

The three deal make-or-break factors

1 · Blade durability

Does consumable pull-through hold its ~46% share and high margin as HIFU commoditizes and the Iruda-added laser/MNRF lines dilute mix? The Q1'26 consumables softness is the first test.

2 · Direct-sales economics

Will the distributor-to-direct conversion (Brazil, Japan, US) recapture the channel margin it is designed to, or permanently reset group margin into the mid-40s on SG&A build?

3 · Sponsor & control

Bain's pledged, partial-exit stake and the suspended >₩3tn re-sale set the price, the timeline, and the governance an acquirer inherits — the dominant non-operational variable.

Verdict for the brief. On the evidence, CLASSYS is a structurally advantaged, cash-generative, recurring-revenue franchise that is mid-pack in scale but first in margin and annuity depth among global peers. The investment question is not whether the business is good — the financials settle that — but whether the **blade survives commoditization and the direct-sales reset**, and at what price the **sponsor** will transact.

1 Company & Business Model

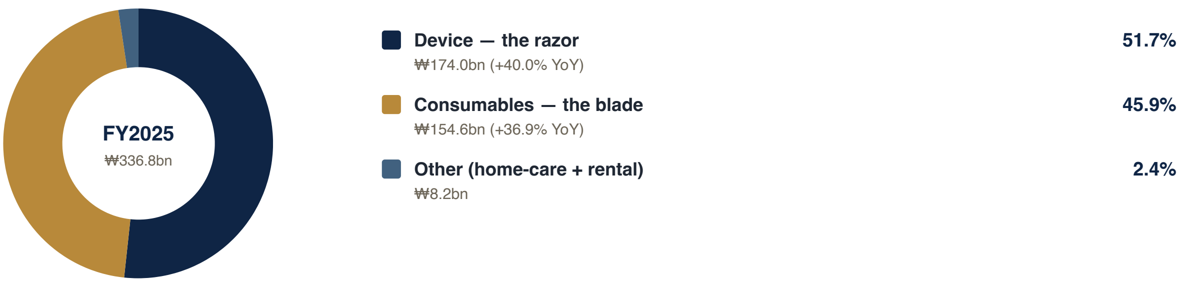
THE RAZOR-AND-BLADE ENGINE

CLASSYS (founded 2007, KOSDAQ-listed 2017) is a Seoul-based maker of energy-based aesthetic medical devices, operating a **single business segment** — "aesthetic-purpose medical devices" DART 20260323001541. It is a full-spectrum energy player, covering HIFU (focused ultrasound), monopolar and microneedle RF, laser and IPL. But its economics are defined less by what the devices do than by how they are monetized.

The engine, in the company's own words

Management frames the model explicitly as a platform: *"the device performs the role of a platform, and on the basis of a growing installed base, consumable revenue recurs"* DART 20260323001541, MD&A. The flywheel is deliberate: a device ships with **free consumable vouchers** that seed trial; trial converts to paid cartridge/tip re-orders; in high-penetration markets, consumption compounds with procedure volume. Unused vouchers sit on the balance sheet as contract liabilities (₩4.1bn at year-end 2025) — a small but telling sign of an annuity being pre-sold.

FY2025 revenue is a near-even razor-and-blade balance — and the blade is growing almost as fast as the razor



Source: DART 20260323001541, MD&A brand-level operating results. "Device" = equipment line; "Consumables" = HIFU cartridges, RF tips, gel pads; "Other" = home-care + rental.

This is the structural distinction from a hardware company. A device-only maker books most of its value at the point of capital sale and is hostage to the placement cycle. CLASSYS books roughly half its revenue from a recurring stream that is **higher-margin, stickier, and indexed to procedure volume rather than capex appetite**. The proof is in the margin record (Section 2): operating margin held at ~50% across a +235% revenue expansion — impossible for a hardware maker facing normal price competition, but natural for a business whose incremental dollar increasingly comes from cartridges.

> **WHY THIS MATTERS FOR DILIGENCE**
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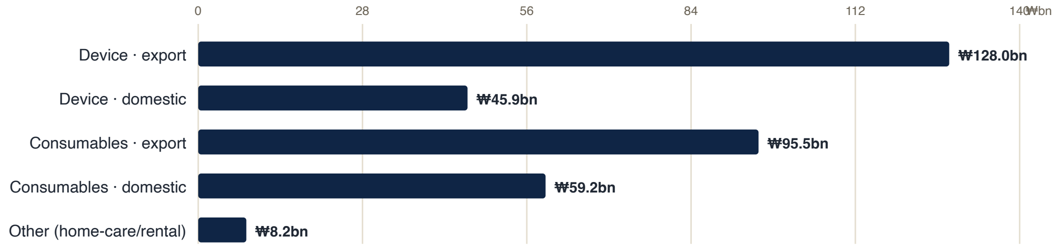
> Value an aesthetic-device company on its **installed base and consumable attach**, not its device revenue. The installed base is the leading indicator; the cartridge/tip pull-through is the realized annuity. CLASSYS's company-reported installed base exceeds **35,000 devices across 70+ countries**, with the Shurink/Ultraformer HIFU franchise alone at ~18,000–21,000 cumulative units and >5.5m HIFU procedures performed in 2025 company communications, 2025–26 — corroborate vs DART.

Segment and geographic structure

CLASSYS is an export-led business: **66.7% of FY2025 revenue (₩224.7bn) came from outside Korea**, routed historically through distributors in ~80 countries; domestic is 33.3% (₩112.1bn) DART 20260323001541, regional revenue. By continent, device sales split roughly Asia 29% / Europe + Middle East 21% / Americas 17%, with named growth markets in the CIS, Thailand, Taiwan and Japan. Both legs of the model grew strongly in FY2025 — domestic device +56%, domestic consumables +29%, export consumables +43% — confirming the annuity is compounding in both mature (Asia/CIS) and newer markets.

Device vs consumables, by export and domestic (FY2025, ₩bn)



Source: DART 20260323001541, MD&A brand-level operating results. Export = 66.7% of total; consumables = 45.9% of total, of which ~62% is export.

The revenue is overwhelmingly own-product: by statutory type, manufactured products are 97.5% of sales, resale goods 2.1%, services 0.4% DART 20260323001541, Note 25. That vertical integration — in-house planning, design, development and production across two Korean plants (Songpa, Seoul; Manan, Anyang) running at 92.6% utilization — is part of the margin story: CLASSYS captures the manufacturing margin on both the device and the consumable it later sells.

The strategic pivot: distributor → direct

The most important business-model evolution underway is the conversion from **indirect (distributor) to direct (subsidiary) sales** to recapture the distributor's margin and own the clinic relationship — and therefore the downstream consumables pull-through. Five subsidiaries are consolidated: Skederm (US and Shanghai, cosmetics), CLASSYS Japan (Tokyo, est. 2024), NS (device manufacturing), and the newly formed **Classys Brasil**, created to absorb the 77.5% acquisition of Brazilian distributor JL Health / Medsystems (closed March 2026) DART; sell-side. This is forward-integration into distribution: it is dilutive to margin near-term (a distributor's ~10–12% operating margin replaces a high-margin sell-in) but, if executed, captures the full value chain in top-tier aesthetics markets.

Ownership in one line (detailed in Section 2)

CLASSYS is not a founder company. It is a **Bain Capital control vehicle**: BCPE Centur Investments, LP acquired control in 2022 for ~₩670bn and, as of February 2026, holds 59.69% on a group basis (45.91% directly), with the founder retaining 9.82% DART 20260226001437. For a diligence reader this is the single most important contextual fact: the cash flows of this razor-and-blade business sit inside a private-equity ownership structure that is in a partial-exit, de-leveraging sequence. The operating analysis that follows is clean; the ownership overlay is where the deal complexity lives.

One concentration flag worth pricing now

CHINA MAJOR-CUSTOMER COLLAPSE

Segment Note 5 of the FY2025 report shows a single major customer ("A") that generated **₩46.9bn in FY2024 fell to ₩0 in FY2025** DART 20260323001541, Note 5. The filing gives no narrative, but the pattern is consistent with a China distributor / NMPA channel disruption (China is not currently a material direct revenue line, and Volnewmer's NMPA approval is only targeted for late-2026/2027). The franchise absorbed the loss of a ~₩47bn customer *and still grew 38.6%* — a striking demonstration of how diversified the installed-base annuity is. But the cause must be confirmed in diligence, and it is a live reminder that channel concentration in any single emerging market is a real exposure.

Capital structure: a net-cash compounder

The balance sheet is the opposite of the levered Western peers profiled in Section 5. CLASSYS is in a **net-cash position in every year of the record**, with FY2025 equity of ~₩0.55tn (₩551.7bn) against ₩153.0bn of liabilities, and retained earnings that have compounded to ₩547.5bn DART 20260323001541. The reported ₩4.1bn of contract liabilities (consumable vouchers + device deposits) is a pre-paid slice of the annuity. R&D runs a disciplined 6.5% of revenue, and the company holds 1,271 registered IP rights (172 patents). This is a self-funding model: new modalities and geographic build-out are financed from operating cash, not debt — the structural pre-condition that, as Section 5 shows, several competitors lacked.

SECTION TAKEAWAY

CLASSYS is a vertically-integrated, net-cash, export-led energy-device platform whose ~46% recurring consumables mix is the source of its ~50% operating margin. The business model is sound and the cash generation is real; the open questions are **not** about the engine but about its ownership (Section 2) and the durability of the blade against commoditization and a margin-dilutive direct-sales build (Sections 5–7).

2 The Last Five Years

2021 → 2025

Between FY2021 and FY2025, CLASSYS revenue rose from ₩100.6bn to ₩336.8bn — a **+235% expansion, ~35% compound annual growth** — while operating profit rose in lockstep from ₩51.7bn to ₩170.6bn DART 20260323001541. The defining feature of the period is not the growth rate; it is that the growth was **margin-neutral**.

KRW 100mn	FY2021	FY2022	FY2023	FY2024	FY2025
Revenue	1,006	1,418	1,801	2,429	3,368
YoY growth	—	+41%	+27%	+35%	+38.6%
Gross profit	779	1,082	1,405	1,911	2,611
Operating profit	517	689	896	1,224	1,706
Net income	438	754†	742	975	1,320
Operating margin	**51.4%**	**48.6%**	**49.8%**	**50.4%**	**50.7%**
Gross margin	**77.4%**	**76.3%**	**78.0%**	**78.7%**	**77.5%**
Operating cash flow	364	548	646	1,028	1,639
Total equity	1,637	2,296	2,835	4,526	5,517

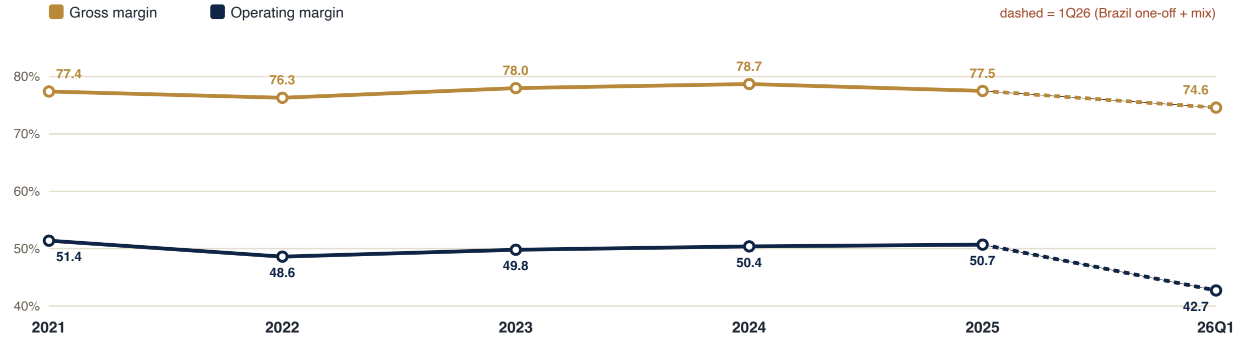
† FY2022 net income is inflated by a non-recurring ₩30.4bn other-income item; use operating-level metrics for like-for-like comparison. Net debt: net cash in every year.

5-year consolidated P&L and balance sheet (KRW 100mn). Source: DART 20260323001541, structured CFS.

Hold those two margin rows in view. **Gross margin pinned in a 76–79% band; operating margin pinned at 49–51% — for five straight years, through a tripling of revenue.** A pure device-hardware maker scaling 35% a year would see margin erode to price competition and mix. CLASSYS did not, because the incremental revenue increasingly carried the high gross margin of consumables rather than the lower margin of one-off device hardware. Gross margin actually *peaked* in FY2024 (78.7%) at peak consumables mix, before the Iruda-acquired laser/MNRF lines (lower margin) diluted it slightly in FY2025.

Margin durability — the chart that is the thesis

Gross and operating margin held flat for five years — then the first crack in Q1 2026 (dashed)



Source: DART 20260323001541 (FY2021–25) and DART 20260515001293 (1Q26 consolidated). The Q1 2026 leg is dashed to mark a single quarter, not an established trend.

The second structural signal is **cash conversion**. Operating cash flow grew 4.5x over the period (₩36.4bn→₩163.9bn) and the ratio of CFO to net income rose above 1.0x in FY2024–25, reaching 1.24x in FY2025 DART 20260323001541. Cash is now running ahead of accounting earnings — exactly what a maturing consumables annuity produces, as cartridge and tip re-orders convert to cash faster than lumpy device sales. The persistent investing outflow is the deployment of that cash into capacity and financial assets, not an operating leak.

The export / scale inflection

The acceleration in FY2023→FY2025 (revenue YoY +27% → +35% → +39%) coincided with the maturing of overseas channels and the post-Ilooda integration. This is the opposite of the typical mid-life device story: CLASSYS is an *accelerating* compounder over the window, not a fading one, and the acceleration is geographic — more installed base in more countries, each feeding the consumable annuity. The business entered 2026 having strung together 20 consecutive quarters of year-on-year revenue growth company communications, May 2026.

> **READ-THROUGH**
>
> Two independent signals — flat ~50% operating margin through +235% revenue, and CFO/NI rising through 1.0x — both point to the same conclusion: the consumables annuity is real, deepening, and the dominant driver of the economics. Everything in the forward view (Section 6) hinges on whether these two signals persist.

The Bain Capital era — a value-up, now in partial exit

The five-year financial story sits inside an ownership story. **Bain Capital (via BCPE Centur Investments, LP) acquired control in 2022**, buying 39.4m shares from the founder and others at ₩17,000/share for ~₩669.9bn DART 20260226001437. Bain has since run the classic value-up playbook — global expansion, the Ilooda combination, a home-beauty line — and now names CLASSYS as its **flagship Korean value-up success case**, cited as it closed its sixth Asia fund at US$10.5bn in May 2026 Seoul Economic Daily, 2026-05-18.

The sponsor is harvesting: two off-market block sales in nine months, but still above 50% control

Source: DART 20260226001381 / 20260226001437 / 20260227000927. Group basis incl. founder; Bain direct stake fell 54.16% → 45.91%.

Two off-market block sales — ₩228bn in May 2025 and ₩324bn in February 2026 — cut Bain's group stake from 74.27% to 59.69%, with the filing stating that part of the proceeds repaid an acquisition margin loan DART 20260226001437. Critically, **Bain has pledged 100% of its directly-held shares** as collateral against a facility refinanced to a ₩950bn cap in September 2025 (a 24+ lender syndicate, 70% maintenance ratio). And a full divestiture process is, as of late May 2026, reportedly *suspended* — Bain sought more than ₩3 trillion while bidders balked Newsis, 2026-05-25. For an acquirer, this is the deal: a known, sponsor-owned, exit-pending asset with a wide bid-ask and a 100%-pledged controlling block. (Risk detail in Section 7.)

Capital allocation: disciplined, sponsor-tilted

Capital allocation has been measured. A ₩25bn treasury-buyback trust bought 350,426 shares (₩18.3bn) in 2025, with treasury shares earmarked for employee-option delivery rather than cancellation — a neutral recycling. The dividend stepped up sharply, ₩200 → ₩257 → ₩1,000 per share across FY2023–25 DART 20260323001541 — a rising payout that, alongside the block sales, is consistent with sponsor cash extraction. Governance is a sponsor board: 7 directors (3 independent, 42.9%), with three Bain-nominated non-standing directors, an independent audit committee, and a modest ₩0.5bn director-comp cap.

The Ilooda (Iruda) combination — consolidating the domestic field

The single largest strategic event of the period was the absorption of **Ilooda (KOSDAQ 164060)**. CLASSYS first took an 18% stake plus a call option in 2023 (~₩40.5bn), then completed an absorption merger effective **1 October 2024**, issuing 1.5m new shares DART 20260323001541; sell-side. The strategic logic is product and geographic complementarity: CLASSYS was HIFU + monopolar-RF led; Ilooda added **microneedle-RF (now Quadessy) and laser (reepot)**, filling the two modality gaps that the rising "combination procedure" trend in clinics demands. Ilooda was also export-heavy (~74–80%) with strength in the US and CIS where CLASSYS was thinner.

The combination also reshaped the competitive map: a domestic energy-device competitor became a subsidiary, widening CLASSYS's modality breadth rather than bounding it from outside (Section 5). The trade-off is margin: Ilooda's lower-margin device mix lifted the consolidated COGS ratio and trimmed group gross margin from ~81% standalone to ~76–77% consolidated. Sell-side analysts model the consolidated margin re-expanding toward 50%+ by 2027 as integration completes Daishin, 2026-02-19.

The first crack: Q1 2026

THE WATCH-ITEM

In **Q1 2026**, revenue grew +13.1% YoY to ₩87.2bn but operating profit fell −4.1% to ₩37.2bn, compressing operating margin to **42.7% (from 50.3%)** and gross margin to 74.6% (from 79.5%) — the first material margin contraction in the five-year record DART 20260515001293; news, May 2026.

The proximate causes appear transitory: a one-month, sub-scale consolidation of the Brazilian distributor that added only ~₩3.9bn revenue while eliminating ~₩3.0bn of intra-group inventory profit (a first-consolidation accounting effect), plus one-off marketing and advisory costs for the Brazil/China build-out. More diagnostically relevant, sell-side analysts attribute part of the miss to **soft high-margin consumables revenue** in the quarter — the first time the blade has wobbled Eugene, 2026-05-14. Management guides to "step-function" growth from Q2 as Brazil consolidates fully. For diligence, this quarter is the central empirical test of the thesis: if consumables re-accelerate and the Brazil one-offs roll off, the model is intact; if the consumables softness persists, the margin premium is being competed away. **Anchor scenarios on margin, not just top line.**

3 Flagship Products Deep-Dive

THE PORTFOLIO BEHIND THE ANNUITY

Post-Ilooda, CLASSYS covers the full energy-based spectrum — HIFU, monopolar RF, microneedle RF, laser and IPL — under a deliberate **multi-platform strategy**: more device SKUs per clinic widens the consumables base and supports the high-revenue "combination procedure" protocols clinics increasingly favour. The portfolio matters to a diligence reader chiefly for what each line contributes to the *blade*: which devices meter a proprietary consumable, and how defensible that consumable is.

Shurink / Ultraformer (HIFU) — the franchise and the annuity engine

The HIFU line — **Shurink Universe** domestically, **Ultraformer MPT / III** for export — is the global megabrand and the primary engine of both device and cartridge revenue. HIFU delivers focused ultrasound for skin lifting and tightening; crucially for the model, each treatment consumes a **single-use cartridge metered by shot count**, so the annuity scales directly with procedure volume. A 2018 sell-side analysis put cartridge replacement at roughly one per ~50 facial treatments, with CLASSYS's replacement frequency *lower* than rivals — i.e. a longer-lived razor that still pulls a steady blade Hana, 2018. Domestic Ultraformer penetration was estimated at ~24.6% of addressable clinics as far back as 2019, implying a long runway still feeding the consumable stream Samsung Securities, 2019; the company reports the franchise at ~18,000–21,000 cumulative units today and >5.5m HIFU procedures in 2025.

The device price ladder positions Shurink/Ultraformer as the value-performance leader: roughly ₩40m versus Merz's premium Ulthera at ~₩80m, winning on shorter procedure time, lower pain and lower cartridge-replacement cost Samsung Securities, 2019. This is the classic razor-and-blade entry strategy — competitively-priced razor, proprietary blade — and it is why the HIFU installed base is the most important single asset in the company.

The multimodal portfolio at a glance

Line	Modality	Flagship	The blade (consumable)	Role / status
HIFU	Focused ultrasound	Shurink Universe / Ultraformer MPT	Single-use cartridges (shot-metered)	Core franchise; annuity engine; CE MDR Aug-2025; US 2027
Monopolar RF	Radiofrequency	Volnewmer (KR) / Everesse (US)	RF tips	"Mega-hit" 2nd razor-blade leg; US scaling; China NMPA 2027
Microneedle RF	Needle-RF	Quadessy	Needle tips (outsourced)	From Ilooda; US launch Mar-2026; combination-procedure driver
Laser	Nd:YAG / pigment	reepot · Elelay	Service/limited consumable	From Ilooda; US pigment indication 2026; lower-margin mix
IPL	Intense pulsed light	Veloce	Limited	Breadth
Cryo / other	Cryolipolysis, hydra	CLATUU Alpha · Aquapure	Gel pads / solutions	Body-contouring breadth
Home-care (B2C)	Personal device	Shurink Home Lift-to-Glow · Skederm	Brand / cosmetics	Nov-2025 launch; nascent but strategic B2C bridge

Source: DART 20260323001541, key products; sell-side; company communications. "Blade" = proprietary recurring consumable.

Volnewmer / Everesse (monopolar RF) is the second razor-and-blade leg and the company's designated growth vehicle in the West. Launched in late 2022, it rides the faster-growing RF curve (Section 4) and adds an RF-tip consumable stream alongside HIFU cartridges. A Yonsei dermatology study cited it as matching or beating higher-priced foreign RF devices on skin-density and pore metrics with lower pain, differentiated by continuous water-cooling and electrode design JoongAng, 2026-05. It is the US tip of the spear (branded Everesse) and the China NMPA candidate.

Quadessy (microneedle RF) and **reepot (laser)** are the Ilooda-acquired lines that complete the modality set and enable combination protocols ("Vollink": Volnewmer + Shurink + Quadessy), which multiply consumables consumed per patient. They are, however, the *lower-margin* additions that diluted gross margin from ~81% to ~77% on consolidation — the mix tension to watch.

Regulatory map — the gate on geographic growth

Every product is a regulated medical device; per-country approval is the precondition for sale and the principal timing variable on the growth pipeline. The filing does not provide a SKU-by-SKU global matrix, but the confirmed and pipeline milestones are:

- **Europe (CE MDR):** Ultraformer MPT (Shurink Universe) received CE MDR certification in **August 2025**, paired with Volnewmer for European expansion — the rollout accelerated across major countries in H2 2025 DART 20260323001541; sell-side.
- **United States (FDA):** Volnewmer/Everesse RF cleared via 510(k) and scaling; Quadessy launched March 2026; reepot pigment indication recognized (US launch within 2026); **Ultraformer MPT HIFU planned for 2027** news, ASLMS 2026.
- **China (NMPA):** the largest deferred opportunity. Volnewmer NMPA approval is targeted for **Q4 2026 / early 2027**, with market entry / revenue in 2027 — China is the next step in the "Ilooda → Brazil direct → China" staircase, not a current revenue line Hana / Daishin, 2026.
- **Japan / CIS / SE Asia:** Japan moving to a direct + distributor hybrid (CLASSYS Japan, with a large clinic-chain order reported pending); CIS, Thailand, Taiwan stable growth markets.

R&D, IP and manufacturing

R&D ran ₩21.8bn in FY2025 — a disciplined 6.5% of revenue — across six units spanning system design, RF/laser, home-beauty and advanced development, with the brief framed as solving clinical "unmet needs" DART 20260323001541. The reinvestment rate is notably higher than listed peer InMode's ~3.6%, relevant to the durability of the technical lead against fast-following HIFU/RF competition.

IP: 1,271 registered rights (172 patents, 3 utility models, 300 designs, 796 trademarks) plus ~1,991 pending — a substantial brand-and-design moat around the Shurink/Volnewmer franchises.

Manufacturing: two Korean plants (Songpa, Seoul; Manan, Anyang) at 92.6% utilization in FY2025; capacity expanded sharply with the Ilooda integration. Needle tips for MNRF are outsourced; other components sourced from multiple non-related suppliers.

> **DILIGENCE NOTE**
>
> The consumable that matters most — the HIFU cartridge — is the most defensible blade (proprietary, shot-metered, in-house). The MNRF needle tips are **outsourced**, a modest supply-chain dependency worth confirming, and the laser lines carry thinner recurring economics. The blade is not uniform across the portfolio.

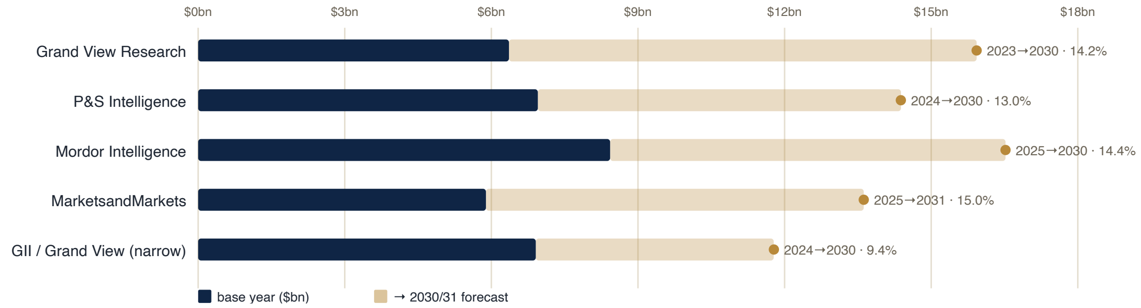
> **SECTION TAKEAWAY**
>
> The portfolio's quality is concentrated in the HIFU franchise and the Volnewmer RF leg — the two lines with proprietary, high-margin, shot-metered consumables. The Ilooda-added laser/MNRF lines broaden the offer and enable combination procedures but dilute margin. The forward growth gates are **regulatory** (China NMPA 2027, US Ultraformer 2027), not demand.

4 Market Structure & TAM

THE ENERGY-DEVICE OPPORTUNITY

The global energy-based aesthetic device (EBAD) market is the relevant universe for CLASSYS. Vendor estimates diverge sharply on definition and scope, so the responsible reading is a **range, not a point**: independent market-research firms cluster the 2024–25 market at roughly **US$7–8.4bn, growing ~13–15% per year to ~US$14–16.5bn by 2030**. Four of five reputable sources land within that band; we treat ~13–14% as the central planning case.

Global energy-based aesthetic device market — five independent vendor estimates (US$bn)



Sources (retrieved 2026-06-02): Grand View, P&S Intelligence, Mordor, MarketsandMarkets, GII/Grand View. Bar = base year; dot = forecast year. NRG adversarial verification: the ~13–14% CAGR is well-corroborated; specific sub-segment figures vary widely (see note).

Two cautions a diligence reader should carry. First, these are commercial market-research estimates with opaque methodologies and meaningful definitional spread (whether the count includes hair-removal lasers, IPL, cryolipolysis and home devices) — our independent verification found the headline EBAD size and ~13–14% CAGR robust, but several narrower HIFU/RF sub-segment figures are single-source or contradicted across publishers, so we present those as ranges below. Second, **management's own framing is more aggressive** — CLASSYS cites a narrower "aesthetic medical device" TAM of roughly US$3.3–5bn (2024) growing to US$9.7–25bn at ~18–20% DART 20260323001541, citing Global Market Insights. That should be read as a directional management view, not an independent estimate; the independent ~13–14% is the defensible base.

WHY THE MARKET STRUCTURE FAVOURS CLASSYS

Market-research vendors agree the industry is still **capital-equipment-weighted** (devices hold the largest revenue share today), with consumables the fastest-rising and highest-margin pool. That is precisely the structural gap a consumables-led operator exploits: as the market matures from device-led to annuity-led, the operator with the largest installed base and highest consumable attach captures disproportionate value. CLASSYS's ~46% recurring mix is years ahead of the industry average.

HIFU vs RF — complements, with RF the faster curve

Within EBAD, the two modalities that define CLASSYS sit at different points on the growth curve. **Aesthetic HIFU** — Shurink/Ultraformer's home — is the noisiest segment to size (estimates span US$0.3–4.2bn for ~2030 depending on whether low-cost Chinese "HIFU beauty machines" are counted); the medically-credible read is a **~US$1–2bn segment growing high-single to low-double digits (~7–10%)**. **RF aesthetic devices** — Volnewmer's home — are larger and faster: **~US$1.5–1.7bn (2024) compounding ~10–14%**, and RF is consistently named the *fastest-growing energy modality*. This is exactly why CLASSYS entered RF with Volnewmer: to ride the faster curve and broaden the consumables base. The two are complements, not substitutes — clinics increasingly buy hybrid HIFU+RF consoles and run combination protocols, which is CLASSYS's Shurink + Volnewmer cross-sell.

Regional structure — where the growth is

Region	Role	Growth (directional)	Relevance to CLASSYS
North America	Largest market ($)	low–mid teens	US entry underway (Everesse now; Ultraformer 2027)
APAC (ex-Korea)	Fastest-growing region	~13–16%	CIS/Thailand/Taiwan/Japan growth; China deferred to 2027 (NMPA)
Korea	Innovation / export hub	~17.3% to 2032	Home market; ~$2.79bn (2024)→$10bn (2032); energy = 63% of revenue
LATAM / Brazil	Standout single-country	~16.5%	Direct-sales pivot (JL Health acq.); 3,000+ Ultraformer units sold
Europe	Mature	high-single/low-double	CE MDR 2025; rollout accelerating

Regional growth structure. Sources (retrieved 2026-06-02): P&S, Mordor, Grand View, Korea/Brazil market reports; figures are directional vendor estimates.

The regional picture aligns neatly with CLASSYS's growth plan: the standout-growth markets (Brazil ~16.5%, Korea ~17%, APAC ~13–16%) are precisely where it is investing in direct sales and where it already has installed-base depth, while the largest absolute pool (North America) and the deferred giant (China) are its pipeline. **Korea** is doubly relevant — both a high-growth home market and the global innovation/export hub for energy aesthetics, with energy-based systems already ~63% of the Korean aesthetic market's 2024 revenue.

Structural tailwinds — the demand drivers for the next five years

Non-invasive shift

The secular move from surgery to non/minimally-invasive "tweakments" — lower price, no downtime, SNS-driven demand — directly expands the HIFU/RF addressable pool, especially among younger and male first-timers.

GLP-1 tailwind

A McKinsey 2025 survey found **63% of GLP-1 (weight-loss) patients seeking aesthetic treatment were *not* prior aesthetic consumers** — a net-new demand pool, with ~50% reporting skin laxity. Skin tightening (HIFU/RF) is the direct beneficiary of "Ozempic face."

Korea medical tourism

Foreign patients hit a record **2.01m in 2025 (+71.9%)**, dermatology 1.31m (+86%); spend ~₩12.5tn. This drives domestic clinic device demand and consumable throughput — CLASSYS domestic device +56%, consumables +29% in FY2025.

The recurring-consumables architecture is itself a structural tailwind: as the installed base compounds globally and procedure volumes rise (combination protocols multiply consumables per patient), the annuity grows faster than the device line. CLASSYS's own disclosure — consumables +36.9% YoY, export consumables +42.6% — shows the blade compounding ahead of headline market growth.

The headwinds, previewed (full register in Section 7)

- **HIFU commoditization:** a crowded Korean field plus low-cost Chinese HIFU threatens consumable pricing power over a five-year horizon — the key bear lever on blade margin.
- **China regulatory:** an anti-corruption campaign chilling imported-device promotion, and NMPA approval timing, gate the largest deferred Asian pool.
- **Cash-pay cyclicality:** all demand is elective and cash-pay (no reimbursement backstop), making the *device* leg recession-sensitive — the precise vulnerability that broke the shallow-blade peers in Section 5.

SECTION TAKEAWAY

CLASSYS competes in a ~US$7–8bn market growing ~13–14%, on the faster RF curve and the fastest regions (Korea, Brazil, APAC), with three powerful demand tailwinds (non-invasive shift, GLP-1, medical tourism). The market structure — still device-weighted, consumables rising — structurally rewards its annuity model. The risks are commoditization of the HIFU blade and the China regulatory gate, not a shortage of demand.

5 Competitive Deep-Dive

PLACING CLASSYS

The competitive map is almost entirely **private or subsidiary-held** — which is itself the headline finding. The Western field is consolidating into stressed PE-owned platforms or exiting public markets altogether; Korean assets are being rolled up by private equity. CLASSYS is the largest **independent, listed, profitable, HIFU-led pure-play** still standing, and by a wide margin the highest-margin operator in the set.

Company	Ownership	Revenue (latest FY)	OP margin	Lead modality	Consumables annuity
CLASSYS	**Bain Capital (listed)**	**₩336.8bn / ~$245m**	**50.7%**	**HIFU + RF**	**~46%** · **best-in-class**
Solta (Bausch seg.)	Bausch Health (strategic)	$518m FY25	n/d	RF (Thermage), laser	High (Thermage tips)
InMode	Public (Nasdaq)	$370m FY25 (−6%)	23.0%	RF (minimally invasive)	~22% · thin
Cynosure Lutronic	Hahn & Co (PE)	~$351m (Cynosure std.)	n/d	Laser / IPL / RF	Lower / less proven
Lumenis (aesth.+vision)	EQT/BPEA (PE)	~$360–425m*	n/d	Laser / IPL / RF	Lower
Wontech	Founder (KOSDAQ)	₩156.8bn / ~$114m	~33%	RF (Oligio) + HIFU	Growing
Jeisys Medical	Archimed (PE, delisted)	~$141m FY24	~25%	RF (Potenza)	Growing
Viol	Listed (KOSDAQ)	₩58.2bn / ~$42m	62%	Microneedle RF	High (small base)
Cutera	Ch.11 → private (2025)	$212m FY23	−74%	Laser / RF / IPL	Thin (failed)
Venus Concept	Delisting (Feb 2026)	sub-scale	negative	RF / IPL	Weak

Peer set (latest FY). Sources: DART (CLASSYS), EDGAR (InMode, Cutera), Bausch filings (Solta segment), Korean trade press & PE disclosures, web (retrieved 2026-06-02). KRW@~1,375/USD.

* third-party aggregator estimate, unverified. Iruda/Ilooda (KOSDAQ 164060) is now a CLASSYS subsidiary, not a competitor.

Three reads from the table. (1) On **scale**, CLASSYS (~$245m) is mid-pack — smaller than Solta, Cynosure Lutronic, Lumenis and InMode — but is the fastest-growing and **by far the highest-margin**. (2) On **annuity depth**, its ~46% recurring mix is the best in the set; only Solta's Thermage franchise is a true annuity peer. (3) On **market structure**, the field is consolidating into distress or private hands, leaving CLASSYS as the rare independent, profitable, listed pure-play. The competitive risk is therefore *not* margin erosion from these peers — none match its economics — but their superior **distribution scale** (Solta, Cynosure and Lumenis have far larger direct-sales footprints).

Domestic Korea — the real near-peers

Wontech (KOSDAQ 336570) is the closest listed Korean comparable, with high modality overlap (laser + RF + HIFU; flagship Oligio RF and the Oligio Kiss RF+HIFU combination). FY2025 was a record: revenue ₩156.8bn (+36.0%), operating profit ₩51.7bn (+48.6%) at ~33% margin, ~70% export trade press, 2026. The read: Wontech is roughly **half CLASSYS's revenue, with a similar export-led model and RF/HIFU overlap, but a materially lower margin and single-hero-product (Oligio) concentration**. It is the most direct head-to-head, and the gap in margin (~33% vs ~51%) is the clearest evidence of CLASSYS's superior annuity depth.

Viol is a microneedle-RF specialist — small (₩58.2bn) but the highest-margin Korean peer at ~62% operating margin, a useful proof that the RF-consumable model can run even richer at smaller scale. **Jeisys Medical** (RF/laser, Potenza) ran ~$141m at ~25% margin before French PE firm **Archimed took it private for ~$742m in 2024** and delisted it from KOSDAQ — a direct illustration that mid-scale Korean aesthetic-device assets are prime PE roll-up targets. **Lutronic**, historically Korea's #1 laser maker, was taken private by Hahn & Company (~2022) and folded into Cynosure Lutronic — so it is no longer an independent listed Korean peer and should not be double-counted.

THE ILOODA CORRECTION

Ilooda / Iruda (KOSDAQ 164060) is not a competitor — it has been a CLASSYS subsidiary since 1 October 2024. Its microneedle-RF (Secret RF) and laser lines now consolidate into the CLASSYS group, widening modality breadth rather than bounding the map from outside. Any competitive analysis treating Iruda as a rival is double-counting CLASSYS's own revenue.

The domestic picture is therefore one of CLASSYS as the **largest, highest-margin, most-diversified** Korean energy-device maker, having absorbed one competitor (Ilooda) while two others (Jeisys, Lutronic) exited to PE. The next-largest independent (Wontech) is half its size at two-thirds its margin.

Global — the strategic twin and the listed yardstick

Solta Medical (Bausch Health segment) is the most important global comparable — the canonical RF/laser razor-and-blade franchise (Thermage tips, Fraxel, Clear+Brilliant). It is the **unit-economics twin**: a high-margin disposables annuity on a >13,800-system installed base. At ~$518m FY2025 it is ~2.1x CLASSYS's revenue, and — tellingly — Bausch explicitly credits **South Korea and China** for Solta's growth, putting it head-to-head with CLASSYS in the same Asian markets Bausch FY2025 release. Bausch's on-again/off-again Solta IPO (filed ~$200m in 2022, withdrawn) means it remains a wholly-owned segment, not a standalone listing — a reminder that even the best annuity franchise can sit trapped inside a strategic owner. Segment revenue trajectory: $300m (FY22) → $347m → $440m → $518m (FY25).

InMode (Nasdaq: INMD) is the purest *listed* razor-and-blade comparable and the public margin yardstick — and its recent results are the empirical case *for* CLASSYS's model. InMode's tip-locking software (consumables disable after a preset pulse count) is the same annuity mechanic. But its consumables share is only **~22%** — less than half CLASSYS's — and that shallow blade is exactly why, when US capital-equipment demand softened, InMode's revenue fell from a **$492m peak (FY2023) to $370m (FY2025), −25% over two years**, with operating margin collapsing from 46.8% to 23.0% and gross margin eroding from ~85% to 78.5% EDGAR INMD. It remains cash-rich (~$555m) and is guiding to a lower plateau ($365–375m, FY2026), not a recovery. The contrast is the thesis in one comparison: **same mechanic, half the blade, and the cycle did the rest.**

Cynosure Lutronic (Hahn & Co, ~$351m Cynosure standalone) and **Lumenis** (EQT/BPEA, ~$360–425m aesthetics+vision; surgical arm sold to Boston Scientific for $1.07bn in 2021) are the large PE-owned laser/IPL/RF platforms — bigger in distribution but carrying LBO debt into a soft capital-equipment cycle, with less-proven consumable conversion than CLASSYS. (Note: contrary to a common assumption, no discrete 2025 Cynosure Lutronic default is verifiable — the confirmed Western distress cases are Cutera and Venus Concept.)

Two cautionary tales — what a shallow blade does when the cycle turns

The clearest way to underwrite CLASSYS is to study the two peers that lacked its model and broke.

INMODE — THE SHALLOW-BLADE COLLAPSE

InMode had the brand, the technology and a fortress balance sheet — but a capital-heavy mix (~78% systems, ~22% consumables). When US system demand softened in 2024–25, there was too little annuity to cushion it:

- Revenue: $492m (FY23) → $395m (FY24) → **$370m (FY25)**, −25% in two years
- Operating margin: 46.8% → **23.0%**
- Gross margin: ~85% → **78.5%**
- FY2026 guide: $365–375m — a lower plateau

The lesson: a high-priced razor without a deep blade is a cyclical hardware business wearing a growth multiple. EDGAR INMD

CUTERA — THE SINGLE-BET BANKRUPTCY

Cutera was a top-five global player whose ~54% blended gross margin was device-grade, not annuity-grade. It bet the balance sheet on one new modality (AviClear acne), funded it with ~$417m of convertible debt, and could not grow into the obligation:

- Gross margin collapsed **55.4% → 19.5%** in FY2023 (stranded-console write-downs)
- FY2023 operating margin **−73.6%**; equity went to **−$172m**
- Chapter 11 March 2025; ~$400m debt wiped; Nasdaq delisted; private in 57 days
- Governance blew up alongside (CEO/chair fired, board fight)

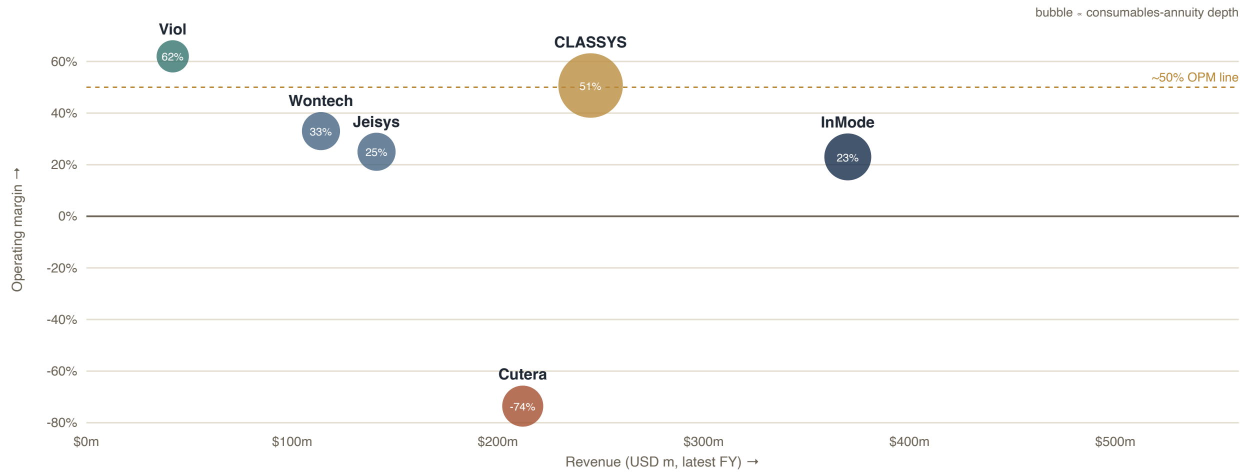
The lesson: "aesthetic device maker" is not itself a quality business — the quality lives in the annuity and the balance sheet. EDGAR CUTR

THE INVERSE-OF-CUTERA TEST

CLASSYS is the opposite of Cutera on all three failure axes: (1) gross margin in the high-70s/low-80s, driven by recurring cartridge pull-through, not device hardware; (2) a diversified installed base across HIFU + RF with genuine blade pull-through, not a single unproven modality; (3) a **net-cash** balance sheet that self-funds new modalities from operating cash, not convertible debt. The diligence imperative that follows: underwrite CLASSYS specifically on the **resilience and margin of consumable pull-through**, the **diversification of modality mix**, and the **net-cash position** — precisely the three things the failed peers lacked.

Positioning — scale vs margin, sized by annuity depth

CLASSYS sits alone in the high-margin / mid-scale quadrant; bubble size ∝ consumables-annuity depth



Sources: DART (CLASSYS), EDGAR (InMode, Cutera), trade press (Wontech, Viol, Jeisys). Cutera plotted at FY2023 (−74% OP margin, pre-Chapter 11). Solta excluded (segment OP margin not disclosed). USD@~1,375/KRW.

The map makes the position visceral. CLASSYS sits above the ~50% operating-margin line that no scaled peer reaches, with the largest annuity bubble of any mid-scale operator. InMode is drifting down the margin axis as its shallow blade fails to defend it; Wontech and Jeisys cluster in the respectable-but-lower 25–33% band; Viol is high-margin but sub-scale; Cutera is off the bottom. The white space CLASSYS occupies — **scaled enough to matter, margin no one else holds, annuity deeper than anyone its size** — is the defensible position.

CLASSYS's defensible position, and where it is exposed

▲ Defensible

- Highest operating margin (~51%) of any scaled peer — the annuity moat
- Deepest consumables mix (~46%) outside Solta
- Net cash; self-funds expansion (unlike levered Western peers)
- Largest independent listed HIFU-led pure-play; absorbed Ilooda
- Higher R&D intensity (6.5%) than InMode (3.6%)

▼ Exposed

- Distribution scale trails Solta/Cynosure/Lumenis (direct-sales footprint)
- Smaller absolute revenue than the global majors
- HIFU commoditization risk to blade pricing (crowded field + China low-cost)
- Solta competing directly in CLASSYS's Korea/China growth markets
- China access still gated (NMPA 2027), where rivals may pre-empt

SECTION TAKEAWAY

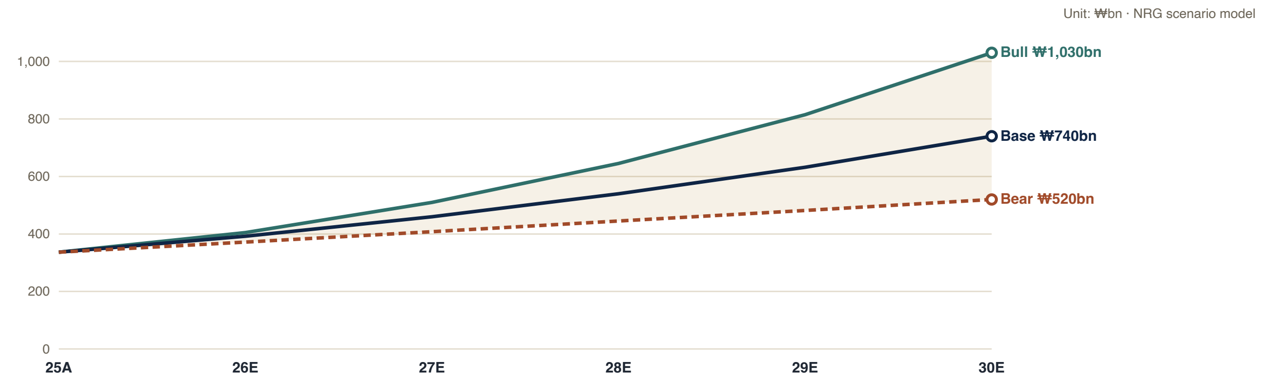
CLASSYS is not the biggest energy-device company, but it is the **best-positioned independent one**: highest margin, deepest annuity, cleanest balance sheet, in a field where everyone else is either distressed, PE-owned, or trapped in a strategic. The competitive battleground for the next five years is **distribution reach** (where it trails) and **blade durability** (where it leads) — not survival, which several peers have already lost.

6 Five-Year Forward View

2026 → 2030, ON A BUSINESS BASIS

The forward view is built on the business, not the share price: installed-base growth, consumable attach, geographic mix, and — the swing variable — operating margin. The central tension is that the two engines of the next five years pull in opposite directions on margin: **geographic expansion grows revenue but the direct-sales build and lower-margin Ilooda mix compress margin**. Scenarios should therefore anchor on margin, not just top line.

Revenue scenarios FY2025A → FY2030E (₩bn) — illustrative NRG model, not a forecast of record



NRG scenario model anchored to the independent ~13–14% market CAGR (Section 4) and the FY2025 base disclosed by CLASSYS. Illustrative; assumptions tabulated overleaf. Not investment advice.

Bull

~₩1.0tn

FY2030 revenue, ~25% CAGR. Consumables mix climbs past 50%; US (Everesse/Ultraformer) and LATAM-direct ramp; China NMPA lands 2027; GLP-1 + medical-tourism compound. Margin **re-expands** toward ~50% as direct-sales fixed costs amortize. CLASSYS reaches its own stated US$1bn / >50%-margin 2030 target.

Base

~₩740bn

FY2030 revenue, ~17% CAGR (tracking TAM + share gain). Consumables hold ~46–48%; geographic build delivers but **margin resets to the mid-40s%** on Ilooda mix and global SG&A. The annuity cushions any device-cycle softness; this is the most probable path.

Bear

~₩520bn

FY2030 revenue, ~9% CAGR. An InMode-style device-cycle rollover plus HIFU price commoditization compress consumable pricing; China NMPA/anti-corruption defers the largest pool; a forced Bain exit into a weak tape de-rates margin and multiple together. Still profitable — the annuity floors it — but the premium erodes.

THE MARGIN QUESTION IS THE VALUATION QUESTION

In all three cases revenue grows — the demand and pipeline support it. What separates them is **whether operating margin holds ~50%, resets to the mid-40s, or compresses further**. The Q1 2026 print (42.7%) is the first data point on that path; the consumables trajectory over the next 2–3 quarters will tell an acquirer which scenario is unfolding.

The growth bridges — where the next ₩400bn comes from

- **LATAM direct (Brazil):** the JL Health/Medsystems acquisition converts ~₩100bn of local distributor revenue to direct, adding ~₩50bn net incremental in 2026 (sell-in re-recognized at retail), expanding to Colombia/Argentina — the nearest-term, highest-conviction bridge, though dilutive at ~10–12% local margin until scaled.
- **United States:** Everesse (RF) scaling now; Ultraformer MPT HIFU planned 2027. The largest absolute market; the biggest optionality but the slowest gate.
- **China (NMPA):** Volnewmer approval targeted Q4 2026 / 2027 — the deferred giant. Upside-deferral rather than base-case revenue; the ₩47bn FY2024→0 customer collapse shows the channel is currently disrupted.
- **Consumables compounding:** the structural bridge — every new installed device anywhere feeds the cartridge/tip annuity for years. The base case assumes consumables grow at least in line with the installed base.

Explicit assumptions

Assumption	Bear	Base	Bull
Revenue CAGR FY25→30	~9%	~17%	~25%
FY2030 operating margin	~38%	~44%	~50%
Consumables mix by 2030	~44%	~47%	>50%
China NMPA / revenue	slips / minimal	2027, modest	2027, material
US Ultraformer	delayed	2027 launch	2027, scaling
Direct-sales margin recapture	fails	partial	full by ~2028
HIFU blade pricing	commoditizes	holds	premium intact

Key scenario assumptions (NRG model). Margin is the dominant swing variable.

SECTION TAKEAWAY

On a business basis, CLASSYS has a credible path to roughly **double or treble revenue by 2030**, anchored to a ~13–14% market growing faster in its key regions plus self-help (US/China/LATAM). The base case is a high-teens revenue CAGR with a **margin reset into the mid-40s** — still exceptional. The bull case requires the blade to deepen past 50% and the direct-sales build to recapture its margin; the bear case is an InMode-style cycle plus a forced sponsor exit. The differentiator across all three is the blade.

7 Due-Diligence Risk Register

WHAT TO UNDERWRITE

The risks cluster into two families: **operational/market** (concentration, China, commoditization, FX, margin) and **ownership/structural** (the Bain exit). On the evidence, none is disqualifying, but each is diligenceable and several are pricing factors.

Risk	Severity	Evidence	Diligence / mitigant
Sponsor-exit overhang	High	Bain 100%-pledged; re-sale suspended (>₩3tn ask); two block sales in 9 mo.	Defines price/timeline/governance; confirm pledge terms, drag/tag, lock-ups
Margin reset	High	Q1'26 OPM 42.7% (−760bps); Ilooda mix + direct-sales SG&A	Track consumables % and OPM over 2–3 quarters; is reset transitory or structural?
HIFU commoditization	Med-High	Crowded KR field + low-cost Chinese HIFU; blade-pricing pressure	Test cartridge ASP trend, replacement frequency, brand premium durability
China access / concentration	Med	Major customer A ₩46.9bn→₩0; NMPA gated to 2027; anti-corruption chill	Confirm cause of customer-A loss; NMPA timeline; China as upside not base
Integration / PMI	Med	Ilooda (2024) + Brazil JL Health (2026) consolidations; one-off costs	Validate synergy/margin-recapture; first-consolidation effects rolling off
FX / tariffs	Med	66.7% export; OPM FX-sensitive; US device-tariff regime open	Hedging policy; tariff exposure on US-bound devices
Cash-pay cyclicality	Med	All demand elective/cash-pay; device leg recession-sensitive	The ~46% blade is the mitigant — stress-test annuity resilience
Outsourced MNRF tips	Low	Needle tips outsourced (vendor undisclosed)	Supply-chain dependency; confirm terms (HIFU cartridge is in-house)

Risk register. Severity reflects potential impact on the investment thesis; all sourced in Sections 1–6.

The encouraging structural point: the operational risks (cyclicality, concentration, even commoditization) are precisely what the **~46% consumables annuity is designed to absorb** — and FY2025 demonstrated it, growing 38.6% even while losing a ₩47bn China customer. The risk that an annuity cannot offset is the **ownership** one, addressed below.

The sponsor situation — the dominant deal variable

An acquirer is not buying a founder company; it is stepping into a **private-equity exit in motion**. The facts, all from filings and primary press:

- Bain entered in 2022 at ~₩670bn (₩17,000/share) and now holds **59.69% group / 45.91% direct** after two block sales (₩228bn May-2025, ₩324bn Feb-2026) DART 20260226001437.
- **100% of Bain's direct shares are pledged** against a ₩950bn-cap facility (24+ lenders, 70% maintenance ratio) refinanced Sep-2025; part of the Feb-2026 block proceeds repaid the loan DART 20260226001437.
- A full divestiture is **reportedly suspended** — Bain sought >₩3tn while bidders balked; the process reportedly drew interest from KKR, Carlyle, Hillhouse Newsis, 2026-05-25.
- Bain just closed Asia Fund VI at $10.5bn (May-2026) and publicly badges CLASSYS as its flagship Korean value-up — i.e. it has both the optics-incentive and, on a 4-year hold, the fund-cycle pressure to monetize Seoul Economic Daily, 2026-05-18.

WHAT AN ACQUIRER INHERITS

A pledged, above-50% controlling block; a wide bid-ask (Bain's >₩3tn vs the market's ~₩2.9tn cap as of late May 2026); founder shares under drag/tag covenants; and a maintenance-ratio mechanism that, in a sharp price fall, could force top-ups or sales. This is the variable that most shapes deal structure and timing — and the one the consumables annuity cannot offset. It should be the first workstream in any process.

The market overlay (foreign-HF lens, secondary)

For completeness, the KRX signals corroborate the narrative without driving it. Short-balance is structurally low (a thin borrowable float, given Bain's pledged block and locked founder shares) but rose to a one-year high of ~0.99% into late May 2026 as the share fell to ~₩44,750 — a mild "building pressure" divergence consistent with the post-Q1 skepticism and exit overhang, not a structural short thesis (absolute short interest stays under 1%) KRX short_balance.csv. Market cap compressed from ~₩3.88tn (May-2025) to ~₩2.92tn (May-2026). These are sentiment overlays; the operating thesis stands on the annuity, not the tape.

FINAL WORD

CLASSYS is a structurally advantaged, cash-generative, recurring-revenue franchise — the best-positioned independent operator in a consolidating industry. The business is not the question; the financials settle it. The deal turns on two things an acquirer must price directly: whether the **blade survives** commoditization and the direct-sales reset, and at what price and structure the **sponsor** will transact.

Working With Nathan Research

COMPLIANT EXPERT NETWORK

Filings and press establish the *shape* of this business; they do not capture the operating detail that decides a deal — the durability of the blade, the real state of the China channel, the texture of the sponsor process. That detail lives with the people who built, sold, prescribed, distributed, and competed with these products — and reaching them, compliantly, is what Nathan Research does.

Nathan Research Group operates **Korea's first dedicated expert-network service, established in 2013**. We were built for the global private-equity, hedge-fund, or corporate-strategy team that has a thesis on a Korean asset and needs primary, on-the-ground diligence that public disclosure cannot supply. The Korean medical-aesthetics complex is one of our deepest benches.

Who we put in the room

For a CLASSYS or energy-device engagement, we source, vet, and convene primary experts across the value chain:

- **Former executives & founders** — from CLASSYS and its domestic and global peers
- **R&D and hardware engineers** — HIFU transducer, RF generator, and cartridge / tip design
- **Clinicians & key opinion leaders** — dermatologists and plastic surgeons who own and run the devices
- **Distributors & channel partners** — Korea and the export markets (Brazil, Japan, CIS, Thailand, Taiwan)
- **Clinic customers** — high-volume buyers who can speak to real consumable pull-through
- **Suppliers, competitors & specialists** — including MFDS / NMPA / FDA / PMDA regulatory and reimbursement experts

How an engagement works

1 · Scope

We translate your thesis into a precise expert profile and question set, mapped to the diligence decisions you need to close.

2 · Source & vet

We identify, screen, and compliance-clear each expert — confirming relevance, recency, and the absence of conflicts before any call.

3 · Convene & synthesize

We arrange interviews on your timeline and, where useful, deliver written synthesis tied back to the questions in this brief.

THE QUESTIONS THIS BRIEF LEAVES OPEN — AND WE CAN HELP CLOSE

Blade durability — how clinics actually re-order cartridges, and whether pull-through is holding after the Q1'26 softness. **Direct-sales economics** — the recaptured channel margin in Brazil and Japan, and what the distributor-to-direct reset costs in practice. **Sponsor & control** — how the Bain process and the suspended re-sale are read by counterparties on the ground. None is answerable from filings alone; all are diligence-able with the right primary voices.

Partner With Nathan Research

START THE CONVERSATION

If your team is evaluating **CLASSYS**, the **energy-based aesthetic-device sector (HIFU / RF)**, or the broader **Korean medical-aesthetics supply chain**, we would welcome the conversation. Tell us the decision you are trying to make — we will tell you, candidly, whether and how our network can help you make it.

What to expect when you reach out: A direct reply from a partner, not an intake form — and a scoping conversation rather than a sales call. From there: a compliant, conflict-cleared expert panel assembled to your timeline, and, where useful, written synthesis that builds directly on the analysis in this monograph.

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Compliance This brief is based solely on public disclosures and media sources. Nathan Research does not request or facilitate the exchange of material non-public information, trade secrets, confidential distributor or customer contracts, or undisclosed pricing, installed-base, or consumable-volume data — and runs every engagement through a documented compliance protocol with expert attestations and client-defined restricted-topic lists, agreed before the first call.

A Appendix

SOURCES · METHODOLOGY · GLOSSARY

Evidence base & methodology

This monograph synthesizes a full inventory of primary and secondary sources, assembled and cross-checked on 2026-06-02. Figures are cited inline to source; where independent sources disagreed (notably market sizing), ranges are presented with attribution rather than single-vendor point estimates.

Regulatory (DART, primary): annual report 2025.12 (rcept **20260323001541**, filed 2026-03-23) and its 5-year structured consolidated financial statements; quarterly report 2026.03 (**20260515001293**); 22 filings in total incl. large-holding (5%) reports (**20260226001437 / 001381**), officer / major-shareholder ownership (**20260227000927**), treasury-stock trust / disposal (**20250609000228, 20260102000433, 20260109000697**), stock options (**20260515003087**), AGM / outside-director (**20260313000628, 20260401003022**).

Market (KRX): by_company/classys OHLCV, short_balance, universe (1-yr, 2025-05→2026-05) — used only as a demand/sentiment overlay, never as a valuation input.

Peers (SEC EDGAR): InMode Ltd. (CIK 1742692) and Cutera, Inc. (CIK 1162461) XBRL companyfacts.

Sell-side: 83 broker reports (2018–2026, 17 brokers) — used for razor-and-blade unit economics, export/China trajectory, and domestic-competitor scale; target prices treated only as third-party sentiment, never as a valuation conclusion.

News: 106 items (Apr–May 2026) for Q1'26 results, Bain re-sale, Brazil roll-up, US/China pipeline.

Web market research (adversarially verified): EBAD/HIFU/RF market sizing and regional growth from Grand View, Mordor, P&S Intelligence, MarketsandMarkets and others, each headline number independently corroborated across ≥2–3 publishers; single-source or contradicted figures flagged and presented as ranges.

Note on company-reported metrics: installed-base counts (>35,000 devices; Shurink/Ultraformer ~18–21k units; >5.5m procedures) and the ~43–53% consumables framings derive from company communications and should be corroborated against audited filings; the audited DART device/consumable split is 51.7%/45.9% (FY2025).

Glossary

HIFU — high-intensity focused ultrasound (skin lifting; Shurink/Ultraformer). **RF** — radiofrequency (skin tightening; monopolar = Volnewmer, microneedle/MNRF = Quadessy). **EBAD** — energy-based aesthetic device. **Razor-and-blade** — device installed base (razor) metering proprietary single-use consumables (blade) into a recurring annuity. **Installed base / IB** — cumulative devices placed in clinics, the leading indicator of future consumable revenue. **NMPA / MFDS / PMDA / CE MDR** — China / Korea / Japan / EU medical-device regulators. **CFO** — cash flow from operations. **OPM** — operating margin.

> **SCOPE & DISCLAIMER**
> This is a business-analysis and market-research document prepared to support due-diligence; it is **not** investment advice, not a solicitation, and contains no price target or valuation conclusion. Forward scenarios are illustrative analytical constructs, not forecasts of record. Prepared by Nathan Research Group, Seoul, 2026-06-02.