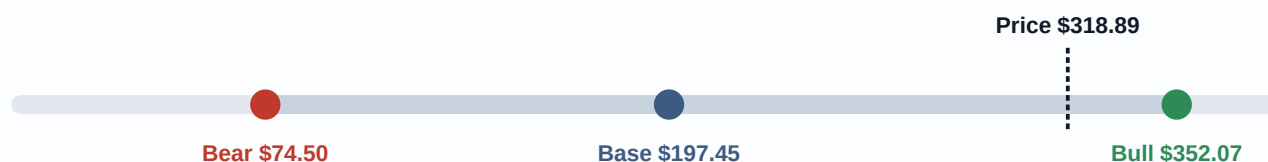


Initiated 2026-09-27 · Price \$318.89 (as of 2026-09-25 close, stockanalysis.com) · Mkt cap \$12.56bn · Healthcare / medical devices (thrombectomy) · Model: verified (standalone / deal-break value only)

Rating: Sell — Conviction: Medium

Penumbra is a good, fast-growing business, but the stock no longer tracks it. It is a claim on Boston Scientific's merger consideration: \$374 cash or 3.8721 BSX shares, prorated about 73% cash and 27% stock. BSX has fallen to \$43.92, so that package is worth about \$318.94, five cents above the price. An owner earns roughly nothing, less than cash, while the deal waits on an FTC Second Request, and a break leaves a standalone business that this model values well below the price even after the \$900mm antitrust break fee. Conviction is Medium, not High, because the market valued Penumbra near today's price before the deal, and the BSX stock leg gains if BSX recovers.

MODEL VALUE RANGE VS PRICE



Business overview

Penumbra makes catheters and pumps that remove blood clots, plus embolization coils and access devices. Q2 2026 revenue was \$390.0mm (+14.9%): thrombectomy \$259.0mm (+12.5%, 66% of revenue) and embolization and access \$131.1mm (+20.0%). The US was \$305.4mm (+17.1%) and international \$84.6mm (+7.6%). Earnings turn on three things: adoption of computer-assisted vacuum thrombectomy in venous, pulmonary embolism and stroke cases; gross margin (67.9% in Q2, +1.9pp); and operating leverage on a sales force built for growth. The company withdrew FY2026 guidance because of the merger.

Competition

The competitor that matters for the thrombectomy thesis is Stryker, which bought Inari (FlowTrier, ClotTrier) in February 2025. In Q2 2026 Stryker's US Vascular organic sales fell 6.7%, which it blamed on a supply disruption at one Inari plant that it expects to have under control by the end of Q3. Penumbra's US +17.1% partly reflects that gap, so pressure would show first as slower US venous and PE growth once Inari recovers. Stryker also flagged newer aspiration-only entrants, and its PEERLESS II trial (1,200 patients enrolled) reads out in mid-2027. The FTC's Second Request, and BSX's commitment to divest up to \$300mm of revenue if needed, show the regulator sees overlap with the buyer. On one definition (stockanalysis TTM EV/EBITDA, 2026-09-25), the large-cap peers trade at 12.7–15.8x.

Bull case

1. **Thrombectomy share gains continue.** Vacuum thrombectomy keeps winning venous and PE cases, helped while Inari recovers from its supply problem. Plays out if growth holds at mid-teens into 2028. *Model: rev_growth*

2. **Margin leverage.** EBITDA margin (after SBC) rose from 1.1% in FY2021 to 14.7% in FY2025, and gross margin is still rising. Plays out if gross margin passes 70% and opex grows slower than revenue, taking EBITDA margin toward 24%. *Model: ebitda_margin*
3. **A buyer has already paid a strategic price.** \$374 a share is about 70x FY2025 EBITDA. If the deal breaks on antitrust, BSX pays a \$900mm fee (~\$22.73 per share pre-tax, 7.1% of market cap), and another large acquirer could return. Plays out on a break with the growth rate intact. *Model: exit_ev_ebitda; the fee is not in the value range (not in FY0 cash)*

Bear case

1. **Competition catches up.** Inari's supply recovers, PEERLESS II favors mechanical thrombectomy, and aspiration-only entrants push on price, so growth halves and margin stalls while inventory builds. Plays out if US thrombectomy growth drops below 10% in 2027. *Model: rev_growth, ebitda_margin, nwc_pct_rev*
2. **Standalone de-rating.** On the model's basis Penumbra trades at 58.0x FY2025 EBITDA, against 12.7–15.8x for large-cap medtech. The 0.70 beta partly reflects deal-pinned trading. Plays out on a break into a market paying peer multiples. *Model: exit_ev_ebitda, wacc*
3. **The deal pays nothing and could get worse.** The spread is about \$0.05, so the completion path returns less than T-bills (fed funds 3.75–4.00%). The stock leg (1.0455 BSX shares per PEN share after proration) ties 14% of the value to a stock that has fallen 55% in a year on repeated guidance cuts. *Model: not in the value range — deal terms, not standalone value*

Valuation & balance sheet

Metric (definition)	Current	Own history (range or 5y avg)	Peers	Source, as-of
EV/EBITDA, aggregator (TTM, lease-inclusive)	59.3x	57.7x (FY2025) – 83.0x (FY2023), FY-end	BSX 13.3x · SYK 15.8x · MDT 12.7x	stockanalysis.com, 2026-09-25
EV/EBITDA, model basis (EV \$11.97bn, no leases / FY2025 EBITDA \$206.5mm)	58.0x	n/a (not restated)	n/a (peers not restated)	model-inputs.json
EV/FCF (TTM)	56.1x	61.4x (FY2024) – 119.4x (FY2023)	BSX n/a · SYK 24.8x · MDT 21.6x	stockanalysis.com, 2026-09-25
Merger spread (blended consideration vs price)	~\$0.05 (0.02%) gross	Deal signed 2026-01-14; \$374 was a 19% premium to the 30-day VWAP (~\$314, derived)	Fed funds 3.75–4.00%	merger / bsx / macro log, 2026-09-25

Model-implied value range (from model-summary.json ; generic module, Gordon-growth DCF and exit-EV/EBITDA DCF, midpoints): Bear \$74.50 · Base \$197.45 · Bull \$352.07 per share, i.e. implied returns of –76.6% / –38.1% / +10.4% vs \$318.89. *These ranges show how the bull and bear drivers translate into value; they are not price targets. Read them as deal-break values, not a view on the deal.* While the agreement holds, the price tracks \$273.02 of cash plus 1.0455 BSX shares, so a 10% move in BSX moves PEN by about \$4.59. Only the bull case sits above the price. Adding the ~\$22.73 antitrust fee to the Base gives about \$220, still well below \$318.89, although the ~\$314 pre-deal 30-day VWAP shows the market was willing to pay near today's price for the standalone business.

Re-rating. The exit method assumes a steep de-rating: 30x against today's 58.0x (–48%), giving \$279.73. The Gordon method gives \$115.18, 59% below the exit method. An 8.7% WACC, 4% terminal growth and inventory-heavy working capital imply a terminal multiple far below 30x, so both methods de-rate, the Gordon one severely. The bull exit method (40x) gives \$498.52.

Tail, quantified. Thrombectomy is 66% of revenue, so a harsher case was run outside the committed model. It assumes a share-loss break: revenue +8%, 0%, +2%, +3%, +3%; EBITDA margin 11% then 10%; NWC 42% of revenue; 12x exit; 10.2% WACC; 2.5% terminal growth. That gives **\$39.00 (–88%)**.

Balance sheet: net leverage not meaningful (net cash \$658.8mm of cash and marketable investments, no funded debt); coverage not meaningful; liquidity \$658.8mm; no material maturities; ratings n/a (unverified). Leases (~\$220mm) are excluded because EBITDA is after rent.

Model note:

- Tier full , status built , verification verified (LibreOffice recalculation matched all 3,206 formula cells). No unverified inputs and no assumptions without basis. Scenario consistency is OK on all 14 rows.

- Standalone only: no deal probability, BSX leg or \$900mm fee.
- No company guidance exists to test Base Y1 EPS (\$4.86) against. FY2025 is FY0; H1 2026 margin (11.7%) is depressed by merger costs.
- The tax rate is an analyst estimate (22%), because reported effective rates are distorted.

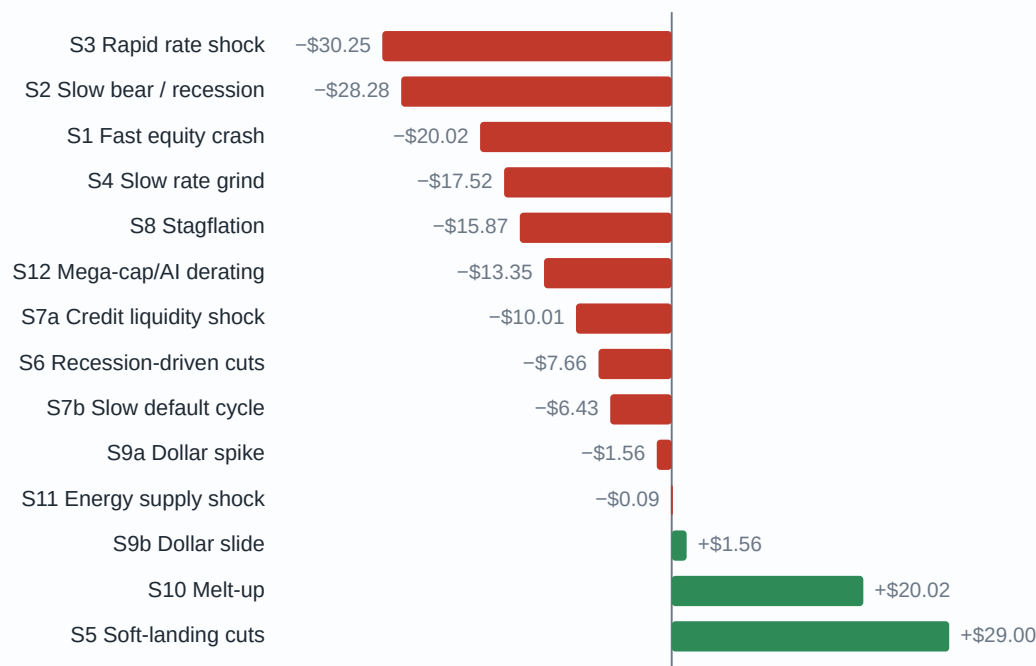
Scenario stress test

*Reasoned from the bull/bear drivers above. The model column comes from the scenario overlays (Base case + shock). **Every row describes the standalone business**, i.e. what a holder owns if the deal breaks in that regime. While the deal holds, macro reaches the price only through the BSX leg (~14% of value) and completion risk.*

Scenario	Effect	Mechanism	Magnitude	Model Δ value vs Base (\$/sh)
S1 Fast equity crash	–	Standalone growth multiple de-rates; procedure demand unaffected	Med	–\$20.02
S2 Slow bear / recession	–	Clot procedures can't wait, but hospital budgets tighten and adoption slows; the multiple compresses. Milder than Base – Bear (\$122.95) on purpose: transitory, while the bear case is permanent share loss	High	–\$28.28
S3 Rapid rate shock	–	Higher discount rate on long-duration cash flows; multiple compresses	High	–\$30.25
S4 Slow rate grind	–	Same channel, grinding	Med	–\$17.52
S5 Soft-landing cuts	+	Lower discount rate re-rates long-duration growth	High	+\$29.00
S6 Recession-driven cuts	–	Growth de-rating outweighs the lower discount rate; procedures hold	Low	–\$7.66
S7a Credit liquidity shock	–	Net cash, no balance-sheet channel; forced selling of high-multiple names	Low	–\$10.01
S7b Slow default cycle	–	Stressed hospital systems slow new-product adoption at the margin	Low	–\$6.43
S8 Stagflation	–	Higher discount rate; input and wage inflation against fixed reimbursement	Med	–\$15.87
S9a Dollar spike	–	International ~22% of revenue; translation drag	Low	–\$1.56
S9b Dollar slide	+	Mirror of S9a	Low	+\$1.56
S10 Melt-up	+	Momentum lifts the growth multiple	Med	+\$20.02
S11 Energy supply shock	–	Freight and resin costs; no demand channel	Low	–\$0.09
S12 Mega-cap/AI derating	–	Premium-multiple growth names de-rate in a leadership unwind	Med	–\$13.35

Currently active/on watch per the playbook: `state.md` lists S3 as partially active, and the macro log records all three legs crossed on 2026-09-25 (10Y 5.17%). S8, S10 and S11 are on watch. S3 is a High row here, S8 and S10 are Med, and S11 is Low.

MODEL VALUE CHANGE VS BASE, BY SCENARIO



What would change the call

Upgrades if:

- BSX recovers enough to widen the spread materially (the stock leg is fixed at 3.8721 shares), or the price falls well below the blended consideration without new deal risk; or
- The deal breaks and the standalone price falls toward the Base case with thrombectomy growth intact.

Downgrades (conviction up) if:

- The FTC signals a challenge or asks for remedies beyond the \$300mm revenue cap; or
- Q3 thrombectomy growth drops below 10% as Inari's supply recovers.

Watch items

- **W1:** FTC outcome: clearance, consent decree with divestitures, or a challenge; any timing agreement or new outside date. Source: 8-K / BSX filings; companies expect a 2026 close. *Model: none*
- **W2:** Blended consideration vs price (BSX at \$43.92 → ~\$318.94). Source: daily quotes. *Model: none*
- **W3:** Q3 2026 thrombectomy growth (Q2 +12.5%) and US growth (Q2 +17.1%). Source: Q3 2026 release (late October 2026, if still reporting). *Model: rev_growth*
- **W4:** Stryker's Inari supply recovery and US Vascular growth (Q2 -6.7% organic). Source: Stryker Q3 2026 call (late October 2026). *Model: rev_growth*

Sources

- Penumbra statistics, financials, cash flow, balance sheet, ratios — <https://stockanalysis.com/stocks/pen/statistics/> · <https://stockanalysis.com/stocks/pen/financials/> · <https://stockanalysis.com/stocks/pen/financials/cash-flow-statement/> · <https://stockanalysis.com/stocks/pen/financials/balance-sheet/> · <https://stockanalysis.com/stocks/pen/financials/ratios/> — accessed 2026-09-27
- Penumbra Q2 2026 results (8-K ex. 99.1, 2026-07-30) — <https://www.sec.gov/Archives/edgar/data/0001321732/000132173226000036/pen-63026xexhibit991.htm> — accessed 2026-09-27
- Penumbra 10-Q, quarter ended 2026-06-30 (merger terms, termination fees, cash, shares) — <https://www.sec.gov/Archives/edgar/data/0001321732/000132173226000037/pen-20260630.htm> — accessed 2026-09-27
- Penumbra DEFM14A (consideration, proration, \$900mm fee, \$300mm divestiture cap, premium to VWAP) — https://www.sec.gov/Archives/edgar/data/1321732/000114036126012785/ny20065749x1_defm14a.htm — accessed 2026-09-27 (via search summary)
- Boston Scientific 10-Q filings, 2026 (FTC Second Request 2026-03-16; stockholder approval 2026-05-06) — <https://www.sec.gov/Archives/edgar/data/0000885725/000088572526000053/bsx-20260630.htm> — accessed 2026-09-27 (via search summary)
- Boston Scientific guidance cuts — <https://www.massdevice.com/boston-scientific-q2-2026-cuts-guidance/> — accessed 2026-09-27 (via search summary)
- Stryker Q2 2026 earnings call highlights — <https://finance.yahoo.com/healthcare/articles/stryker-corp-syk-q2-2026-050423279.html> — accessed 2026-09-27 (via search summary)
- CNBC, deal announcement and premarket move — <https://www.cnbc.com/2026/01/15/boston-scientific-beefs-up-heart-device-portfolio-with-penumbra-deal.html> — accessed 2026-09-27 (via search summary)
- Peer statistics: BSX <https://stockanalysis.com/stocks/bsx/statistics/> · SYK <https://stockanalysis.com/stocks/syk/statistics/> · MDT <https://stockanalysis.com/stocks/mdt/statistics/> — accessed 2026-09-27
- Daily macro log (10Y, fed funds, S3 status), `logs/macro-2026-09.md`, 2026-09-25 entry

Independent single-name research. Directional characterization, not a price target, execution instruction, or portfolio recommendation.