NVOCO gideon lens

Novo Nordisk (NVO.CO) - Gideon Lens

Report date: 2026-09-09 **Security underwritten:** Novo Nordisk B share, Nasdaq Copenhagen (XCSE:NOVO-B; provider symbol NOVO-B.CO) **Price anchor:** DKK 288.90 at the 2026-09-09 close **TTM period:** FY2025 less H1 2025 plus H1 2026, ending 2026-06-30 **Exact horizon:** 2031-06-30, five years **Decision question:** Has Novo Nordisk earned a funded replacement in the portfolio?

Executive conclusion

Verdict: PASS

Scorecard:

Gate	Result	Notes
Management	YELLOW	New CEO, guidance resets, and Catalent returns need proof
Moat	YELLOW	Strong metabolic franchise; post-semaglutide 2046 renewal remains unproved
P/E <= 15 on confident EPS at TTM + 5 calendar years	PASS	DKK 26.93 Base EPS gives 39.85% price cushion
Compounder Score	Audited 60 / 100	Reject under stretch rubric; dream-investment evidence is insufficient
Business Quality Score	Audited 54 / 80	Profitable franchise, but adjusted ROIC and ROIIC evidence is incomplete
20% Return UW Score	Audited 6 / 20	Base 10.28%; recalibrated probability-weighted gross return 7.92%

One-line thesis (or reason to pass): Novo is an exceptional metabolic franchise at a de-rated price, but two qualitative gates remain YELLOW and the post-red-team probability-weighted return is below the mandate hurdle.

The valuation gate passes in isolation. Base terminal EPS of DKK 26.9346 supports DKK 404.02 per share at 15x, versus DKK 288.90 today. That is not enough for an ER2 BUY because the decision rule is non-compensating: two YELLOW qualitative gates require PASS even when the valuation gate passes. The audited 60/100 compounder score is diagnostic, not a fourth gate, but it reinforces the same conclusion. At the current price, the independently locked Base case produces only 10.28% gross DKK and 8.15% net-SGD annualized returns; the recalibrated probability-weighted cases produce 7.92% and 5.84%, respectively.

What the market is underwriting

Novo remains dominated by Obesity and Diabetes care, which generated 93.7% of FY2025 sales and 99.1% of disclosed segment operating profit. Ozempic and Wegovy together contributed roughly two-thirds of group sales. That concentration is economically attractive while semaglutide retains efficacy, access, manufacturing scale, and brand strength, but it makes price erosion, Lilly share gains, formulary positioning, and oral-mix economics decisive to equity value.

The historical franchise is unusually profitable. Consolidated operating margin averaged about 42.9% during FY2016-FY2025, while FY2025 net leverage remained modest. The balance sheet is not the principal constraint. The harder question is incremental return: capacity investment, the Catalent transaction, and pipeline spending expanded the capital base during a period of lower realized prices and competitive pressure. The scoring audit therefore reduced the headline quality score because the available ROIC is a simple measure and the available ROIIC is a change-in-invested-capital proxy, not a fully adjusted cumulative-reinvestment schedule.

The moat is real but not fully durable to 2046. Novo has integrated peptide science, clinical evidence, regulated manufacturing, devices, prescriber familiarity, and distribution. Lilly has nevertheless demonstrated that superior efficacy, supply, and access can penetrate those advantages. Semaglutide's key US compound patent expiry in 2032 means the terminal-quality case depends on successful platform renewal rather than merely extending today's franchise.

Management is also a proof point rather than a settled strength. Mike Doustdar has relevant commercial experience and has acted quickly on costs, but his CEO tenure is short, guidance visibility has been uneven, and neither the large capacity program nor Catalent has yet demonstrated an acceptable acquisition-inclusive return. Incentives disclose limited direct linkage to ROIC, free cash flow, per-share value creation, or relative TSR.

Security return underwriting

Security return underwriting (mandatory even when the verdict is PASS):

Measure	Result	Notes
Primary valuation method	P/E	One audited method used for all scenarios, probability weighting and net-SGD
Gross local-currency bear / base / bull IRR	-11.04% / 10.28% / 26.05%	Five-year annualized shareholder return in DKK
Probability-weighted gross local-currency IRR	7.92%	CAGR of 30% / 60% / 10% weighted terminal wealth
Return bridge	DKK 288.90 to terminal wealth	EPS x exit P/E plus distributions; no net-debt or cash add-on

Gross local-currency underwriting is in DKK; net-SGD adjustments appear separately in CIO actionability. P/E is the controlling method because statutory diluted EPS reconciles cleanly and a complete EV/NOPAT or P/B-ROE terminal bridge is not available. Normalized current EPS is DKK 21.1548 and normalized current P/E is 13.656x. The reported 11.029x P/E includes the event-heavy 340B reversal and pipeline impairments and is disclosure-only. Bear/Base/Bull exit P/Es of 10x/15x/20x were locked before the return calculation from normalized-current, historical, and company-specific evidence. No net cash, debt, lease, non-operating asset, or other claim is added after applying P/E.

Bear-case operating and return bridge

Bear case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	DKK 303.917bn	DKK 273.422bn	-2.09%	Price and share pressure outweigh treated-volume growth
Operating margin	39.68%	27.81%	-11.87 pp	Lilly, payer pressure, oral mix, and underutilized capacity
Operating earnings	DKK 120.583bn	DKK 76.042bn	-8.81%	Revenue x normalized operating margin
Diluted share count	4,442.2m	4,356.6m	-0.39%	Buybacks slow as cash conversion weakens
EPS	DKK 21.1548	DKK 12.0261	-10.68%	Statutory diluted EPS in the P/E bridge
Valuation	13.656x	10.0x	-26.77%	De-rating for negative growth and lower margins
Share value	DKK 288.90	DKK 120.26	-16.08%	Terminal EPS x 10.0x; no second balance-sheet adjustment
Annual dividend	DKK 11.70	DKK 5.00	-15.64%	Lower earnings and cash conversion constrain distributions
Dividend yield	4.05%	4.16%	+0.11 pp	Annual dividend divided by endpoint share value
Five-year dividends	-	DKK 40.70	cumulative	Explicit annual dividend path
Total ending value	DKK 288.90	DKK 160.96	-11.04% gross DKK IRR	Terminal share value plus cumulative distributions

Base-case operating and return bridge

Base case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	DKK 303.917bn	DKK 378.636bn	4.49%	Volume growth offsets net-price and mix pressure
Operating margin	39.68%	39.81%	+0.13 pp	Capacity absorption offsets oral mix and pricing pressure

Base case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Operating earnings	DKK 120.583bn	DKK 150.737bn	4.57%	Revenue x normalized operating margin
Diluted share count	4,442.2m	4,249.4m	-0.88%	Moderate buybacks remain funded after dividends and capex
EPS	DKK 21.1548	DKK 26.9346	4.95%	Statutory diluted EPS in the P/E bridge
Valuation	13.656x	15.0x	+9.84%	Mild premium for completed cadence, below prior growth regime
Share value	DKK 288.90	DKK 404.02	6.94%	Terminal EPS x 15.0x; no second balance-sheet adjustment
Annual dividend	DKK 11.70	DKK 16.00	6.46%	Distribution growth broadly follows recurring earnings
Dividend yield	4.05%	3.96%	-0.09 pp	Annual dividend divided by endpoint share value
Five-year dividends	-	DKK 67.20	cumulative	Explicit annual dividend path
Total ending value	DKK 288.90	DKK 471.22	10.28% gross DKK IRR	Terminal share value plus cumulative distributions

Bull-case operating and return bridge

Bull case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	DKK 303.917bn	DKK 480.186bn	9.58%	Strong share, access, oral adoption, and pipeline renewal
Operating margin	39.68%	46.31%	+6.63 pp	High utilization and favorable mix restore operating leverage
Operating earnings	DKK 120.583bn	DKK 222.374bn	13.02%	Revenue x normalized operating margin
Diluted share count	4,442.2m	4,202.7m	-1.10%	Strong cash generation funds sustained buybacks
EPS	DKK 21.1548	DKK 41.9890	14.70%	Statutory diluted EPS in the P/E bridge
Valuation	13.656x	20.0x	+46.45%	Growth recovery, still below the FY2021-FY2024 regime
Share value	DKK 288.90	DKK 839.78	23.79%	Terminal EPS x 20.0x; no second balance-sheet adjustment
Annual dividend	DKK 11.70	DKK 22.00	13.46%	Strong earnings and cash conversion fund distributions
Dividend yield	4.05%	2.62%	-1.43 pp	Annual dividend divided by endpoint share value
Five-year dividends	-	DKK 79.70	cumulative	Explicit annual dividend path
Total ending value	DKK 288.90	DKK 919.48	26.05% gross DKK IRR	Terminal share value plus cumulative distributions

The original segment-builder prior of 30% Bear / 50% Base / 20% Bull produced a 10.12% gross probability-weighted return. The red team objected that a 20% Bull weight was uncalibrated because Bull requires correlated successes in efficacy, access, price/share, utilization, margins, pipeline, and the exit multiple. The controlling distribution was repaired to 30% / 60% / 10%, lowering expected terminal wealth to DKK 422.97 and gross IRR to 7.92%. The independent scoring audit replayed the result, and the red team classified the objection MATERIAL_RESOLVED. A further Bull cut to 5% reallocated to Base changes gross probability-weighted IRR by only 1.17 percentage points, below the materiality threshold.

CIO actionability

CIO actionability (separate from ER2 underwriting):

Measure	Result	Notes
Status	WATCH	Quality is credible, but two YELLOW gates and returns block funding
Bear / Base / Bull net SGD IRR	-13.25% / 8.15% / 23.98%	Five-year annualized after costs, withholding, and FX translation
Probability-weighted net SGD IRR	5.84%	Controlling 30% / 60% / 10% scenario weights
10% mandate hurdle	FAIL	Base and probability-weighted net cases both must clear
15% stretch hurdle	FAIL	Bull clears; Base and probability-weighted cases do not
Downside and portfolio fit	FAIL / UNAVAILABLE	Bear downside fails; current portfolio context was not supplied
Proposed sizing ceiling	none	Research conclusion only; no owner or trade authority

The net-SGD diagnostic assumes 1.0% annual DKK depreciation versus SGD, 0.5% entry and exit friction, 27% dividend withholding with no reclaim, and no Singapore capital-gains tax. These are conservative diagnostics rather than investor-specific tax advice. Portfolio holdings, concentration, factor exposure, liquidity budget, and risk budget were unavailable, so no sizing ceiling is proposed.

Trade execution authorized: NO

What would change the decision

Kill / trigger criteria:

- BUY trigger: price at or below DKK 189.37 is the method-matched 20% Base-IRR threshold, but a price trigger alone is insufficient; Management and Moat must also upgrade to PASS.
- PASS trigger: two consecutive quarters in which metabolic sales growth trails treated-volume growth by at least 10 percentage points and adjusted operating margin is below 37%.
- PASS trigger: another annual sales or operating-profit guidance reduction of at least 5 percentage points without a discrete, fully reconciled one-off.
- PASS trigger: two consecutive quarters of metabolic segment growth below 3% CER while Lilly continues to gain obesity share.
- Upgrade to BUY conditions: two consecutive quarters of stable or rising US realized-price/share economics; group adjusted operating margin at or above 40%; evidence that capacity and Catalent earn acceptable acquisition-inclusive returns; and a credible post-semaglutide asset with Phase 3 efficacy, reimbursement, and manufacturability evidence.

Research sizing if actionable: none. No funded replacement is earned at DKK 288.90. Any future sizing proposal requires fresh portfolio context and explicit owner approval.

Bottom line

Novo's current price is low enough to pass the narrow P/E-15 gate, but the five-year investment case is not low-risk. Base terminal operating margin of 39.81% is the number most likely to be too optimistic because declining realized prices, lower-margin oral mix, and capacity depreciation must all be absorbed. Bear stacks operating deterioration with a 10x P/E, so it may be punitive; a 12x Bear sensitivity improves gross IRR from -11.04% to -8.53%, but does not make downside acceptable. The appropriate conclusion is PASS for ER2 underwriting and WATCH for CIO monitoring, with no trade, sizing, ranking, or portfolio mutation authorized.

Appendix A - Company Primer

Novo Nordisk - Company Primer

Security covered: Novo Nordisk A/S B ordinary share, Nasdaq Copenhagen (`NOVO B`; queue alias `NVO.CO`) **Information cutoff:** 9 September 2026 **Reporting currency:** Danish kroner (DKK) **Financial anchor:** TTM ended 30 June 2026; forward horizon elsewhere in this ER2 is 30 June 2031

Source discipline and how to read this primer

Every financial-statement, product-sales, segment-profit, cash-flow, balance-sheet and per-share figure in this primer comes from the QFR-sealed `C:\Users\Admin\OneDrive\GPT\ER 2.0\Novo Nordisk\quant_foundation.md`, including calculations made directly from its figures. The companion `data_package.md` was still an in-progress stub when this primer was prepared and was not used as evidence. Business, clinical, commercial, governance and risk context was refreshed from live primary sources, principally Novo Nordisk's [Q2 2026 announcement](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590), [Q2 2026 investor presentation](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/pdfs/financial-results/2026/Q2-2026-Full%20presentation.pdf), [2025 Annual Report](https://annualreport.novonordisk.com/2025/), [2025 Form 20-F](https://www.sec.gov/Archives/edgar/data/353278/000035327826000012/nvo-20251231.htm), current [R&D pipeline](https://www.novonordisk.com/science-and-technology/r-d-pipeline.html), and [governance disclosures](https://www.novonordisk.com/about/corporate-governance.html).

This is an orientation document, not the valuation, management, moat or segment forecast. Its purpose is to show where the economics come from, why the current competitive transition matters, and which operating facts the later underwriting must resolve.

1. Business overview

Novo Nordisk is a Danish pharmaceutical company built around chronic diseases in which treatment is repeated for years and, often, for life. Its commercial center of gravity is diabetes and obesity. The company discovers molecules, runs clinical trials, obtains regulatory approval, manufactures active pharmaceutical ingredient and finished medicines, supplies delivery devices, and markets treatments to physicians, health systems and patients. It also has a smaller rare-disease franchise in haemophilia and other rare blood disorders, growth-hormone-related endocrine disorders, and a handful of established women's-health products.

The economic customer is not simply the patient. A clinician diagnoses and prescribes; a regulator determines whether the medicine may be sold; insurers, national health systems, pharmacy benefit managers and public programmes decide whether and on what terms it is reimbursed; wholesalers and pharmacies dispense it; and patients decide whether to start and stay on therapy. In the United States, Novo sells chiefly into wholesale distribution, while the net price is shaped downstream by payer formulary placement, rebates, charge-backs, government discounts and patient-support programmes. Direct-to-patient self-pay, NovoCare pharmacy access and telehealth partnerships have become more important in obesity, but they complement rather than eliminate payer economics. Novo reported that Wegovy is available through retail pharmacies, its own pharmacy channel and selected telehealth providers, illustrating how consumer-style access is being layered onto a conventional prescription-drug system ([June 2026 Wegovy access update](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916566)).

The products solve different but related problems. Insulins replace or supplement a hormone the body cannot produce or use adequately. GLP-1 medicines improve glucose control and reduce appetite, allowing one molecule, semaglutide, to serve different indications and doses under Ozempic, Rybelsus/Ozempic pill and Wegovy brands. Obesity treatment is increasingly framed not only as weight loss but as management of chronic disease and associated cardiovascular, renal and metabolic risks. Rare-disease products replace missing clotting factors, mimic their activity, or replace growth hormone. These are specialist products with smaller patient populations, high clinical consequences and a premium on convenience, reliability and long-term safety.

Novo's value chain is unusually integrated. It spans target discovery, clinical development, regulatory work, peptide or biologic API manufacture, formulation, filling or tableting, device assembly and packaging, and cold-chain distribution. That integration can support quality, supply reliability and manufacturing know-how, but it also exposes the company to long construction lead times and execution risk when demand or product mix changes faster than factories can be reconfigured.

2. Revenue architecture

Novo reports two additive business segments. The numbers below are FY2025 and tie exactly to statutory sales and operating profit.

FY2025 segment	Sales (DKK m)	Share of sales	Segment operating profit (DKK m)	Margin
Obesity and Diabetes care	289,456	93.7%	126,446	43.7%
Rare disease	19,608	6.3%	1,212	6.2%
Novo Nordisk total	309,064	100.0%	127,658	41.3%

Obesity and Diabetes care

This segment is effectively the company. It includes diabetes GLP-1 products, insulins, obesity medicines and a small set of other diabetes products and devices. In FY2025, diabetes-care sales were DKK 207,109 million and obesity-care sales were DKK 82,347 million. Diabetes GLP-1 sales alone were DKK 152,202 million, or 49.2% of company sales; insulin was DKK 53,137 million, or 17.2%; and obesity care was 26.6%. Ozempic generated DKK 127,089 million, equal to 41.1% of total company sales, while Wegovy generated DKK 79,106 million, or 25.6%. Rybelsus contributed DKK 22,093 million. This is therefore not a broadly diversified pharmaceutical portfolio: it is a concentrated metabolic-disease platform whose most important franchises share semaglutide biology, manufacturing requirements, payer negotiations and competitive threats.

The TTM mix through June 2026 shows the same concentration but a changing form factor. Obesity and Diabetes care generated DKK 308,993 million of DKK 329,431 million total sales. Diabetes GLP-1 contributed DKK 159,721 million; obesity care DKK 90,046 million; and insulin DKK 57,119 million. The TTM obesity total included DKK 82,215 million of injectable Wegovy and DKK 5,474 million from the newly introduced Wegovy pill. The pill matters strategically because it can reach patients who avoid injections and can use different dispensing and manufacturing steps, but it still consumes semaglutide API and does not remove payer or adherence constraints.

The customer and channel differ by geography. US Operations is more commercial and rebate-intensive: brands compete for insurer and PBM formulary status, patient co-pays influence persistence, and direct cash access has become more relevant in obesity. International Operations spans public tenders, national reimbursement bodies, private channels and country-specific launches. Novo's Q2 2026 presentation described International Operations obesity growth and new launches across Europe, the Middle East and other markets, while also showing that regional momentum varies. Geography therefore changes realized price, pace of reimbursement, device format and launch sequence even when the molecule is the same.

Rare disease

Rare disease contributed DKK 19,608 million in FY2025. Rare blood disorders generated DKK 11,955 million, primarily NovoSeven and haemophilia products including NovoEight, Esperoct, Refixia, NovoThirteen and Alhemo. Rare endocrine disorders generated DKK 5,959 million, primarily Norditropin and once-weekly Sogroya. Other rare disease contributed DKK 1,694 million, mainly established products such as Vagifem and Activelle.

The segment provides therapeutic and customer diversification but not yet material earnings diversification. Its FY2025 operating profit represented less than 1% of group operating profit, and the TTM margin fell to 2.3% on DKK 20,438 million of sales. Because Novo does not disclose segment cost of goods and operating-expense lines, the primer should not invent a product-level margin explanation. What can be said is that current rare-disease sales are too small to offset a material disruption in semaglutide, and that late-stage assets such as denecimig must first succeed clinically, gain reimbursement and scale before the segment can become a meaningful second profit engine.

3. Unit economics: how sales become operating profit

Incretins and insulin

The attractive part of Novo's model begins with patented molecules used repeatedly by a large chronic-disease population. Once a biologic or peptide therapy is approved, the same scientific and manufacturing platform can support multiple doses, devices and indications. Semaglutide is the clearest example: diabetes and obesity brands share core biology while distinct labels, dose strengths, devices and channels broaden the addressable market. Lifecycle evidence in cardiovascular and kidney outcomes can improve clinical differentiation and payer relevance without requiring an entirely new molecule.

The gross economic advantage is offset by four large claims on revenue. First, the medicine must be produced at high quality and high volume through API, formulation, filling or tableting and device operations. Second, Novo must fund selling and market-access infrastructure because the prescription is won physician by physician and formulary by formulary. Third, clinical evidence and the next-generation pipeline require continuous R&D. Fourth, the difference between list and net price can be substantial, especially in the United States, because rebates, public-programme discounts, wholesaler charge-backs and patient support reduce gross sales before reported net sales.

Novo does not disclose COGS or operating costs by segment, so segment margins are the cleanest audited economic read. Obesity and Diabetes care produced a 43.7% operating margin in FY2025 and 45.8% in the TTM through June 2026. The group TTM operating margin was 43.1%. These margins reflect the high value per unit of patented medicines and scale across R&D, manufacturing and commercial infrastructure. They should not be extrapolated mechanically: lower realized prices, higher-dose products that consume more API, accelerated launches, adverse mix, redundant capacity or a need to outspend Lilly could reduce incremental margins.

The moat and bottleneck are intertwined. Novo's Q2 2026 presentation describes decades of high-volume insulin and GLP-1 manufacture, continuous-production know-how, API yield optimization and in-house device expertise. Those capabilities are difficult to replicate quickly. But a fixed manufacturing network also means utilization matters. API capacity may take more than five years to build and fill-finish more than three years, according to the same presentation. If demand exceeds capacity, Novo loses prescriptions and payer leverage; if a competitor wins share after assets are built, underutilization depresses returns.

Rare disease

Rare-disease unit economics depend on small patient pools, specialist prescribing and a high value placed on avoiding bleeding events, reducing injections or improving convenience. Products can command premium economics when they deliver differentiated outcomes, but each franchise must absorb clinical, regulatory, medical-affairs and launch infrastructure across relatively few patients. Novo's reported segment margin is currently thin and volatile. Denecimig, for example, aims to offer convenient prophylaxis across weekly to monthly dosing; Sogroya shifts growth hormone from daily to weekly administration. These improvements can support adoption, but the segment's small base makes failed trials, delayed reimbursement or slow switching disproportionately important.

Cash conversion and capital intensity

Cash generation is strong but no longer asset-light. In FY2025 Novo produced DKK 119,102 million of operating cash flow, spent DKK 60,140 million on PP&E and generated DKK 58,962 million of core free cash flow. On a comparable basis, the TTM through June 2026 produced DKK 132,774 million of operating cash flow, DKK 56,043 million of PP&E capex and DKK 76,731 million of core free cash flow. TTM core free cash flow equaled about 65.9% of DKK 116,443 million net profit. The gap is principally the current capacity build, not a structurally low-margin business.

This reinvestment has changed the balance sheet. At June 2026 Novo held DKK 44,482 million of cash and DKK 500 million of marketable securities against DKK 140,127 million of gross borrowings including leases; issuer-defined net debt excluding leases was DKK 86,523 million. The group can service that balance sheet from current cash generation, but the debt and capex make manufacturing execution more financially consequential than during the earlier, capital-light years.

4. Industry structure, competition and the incretin transition

The obesity and diabetes market has unusually large unmet demand, but addressable patients do not automatically become profitable prescriptions. Diagnosis, physician capacity, insurance coverage, side-effect tolerance, supply and persistence all constrain conversion. Medicines also compete on a multi-dimensional scorecard: weight loss, glucose control, cardiovascular and renal outcomes, safety, dosing frequency, oral versus injectable form, device convenience, availability and net cost.

Eli Lilly is the critical strategic competitor. Tirzepatide, sold as Mounjaro in diabetes and Zepbound in obesity, combines GIP and GLP-1 biology and has taken share. Novo's 2025 Form 20-F acknowledged that Ozempic lost its longstanding lead in US weekly type 2 diabetes prescriptions to a competing GLP-1 product. The most important direct clinical evidence is also sobering: in the 2026 REDEFINE 4 head-to-head obesity trial, CagriSema produced 23.0% weight loss under the efficacy estimand versus 25.5% for tirzepatide and failed its primary non-inferiority endpoint ([Novo announcement](https://www.novonordisk.com/content/nncorp/global/en/news-and-media/news-and-ir-materials/news-details.html?id=916501)). CagriSema may still be clinically valuable, but it cannot be treated as an automatic efficacy reset.

Novo's response is a portfolio rather than one molecule. Injectable Wegovy has outcomes evidence and brand recognition; higher-dose Wegovy 7.2 mg seeks greater efficacy; Wegovy pill broadens the route of administration; CagriSema adds amylin to semaglutide; and zenagamtide combines GLP-1 and amylin activity in one molecule. Lilly is also developing oral and next-generation agents. Competition therefore moves on multiple fronts at once, and pricing can weaken even as treated volumes rise. Novo's Q2 2026 presentation explicitly said GLP-1 volume growth was partly offset by lower realized prices.

Compounded or unapproved semaglutide is a separate competitive and safety issue. Shortage-era compounding expanded patient access at lower cash prices, but Novo argues that continued unapproved copying after the FDA shortage resolution is unlawful and unsafe. Litigation can constrain infringing products, as shown by an August 2026 Dutch injunction, but enforcement will vary by jurisdiction and does not eliminate patient willingness to seek cheaper alternatives ([company announcement](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916592)).

5. Manufacturing and capacity

For Novo, manufacturing is both a barrier to entry and one of the largest thesis risks. The end-to-end process includes peptide or biologic API, formulation, sterile filling or tableting, device assembly, packaging and distribution. GLP-1 demand initially exposed bottlenecks at fill-finish and device stages; over time, API availability and dose intensity also matter. Higher-dose semaglutide can improve efficacy but consumes more API per patient, while oral peptide dosing can require materially different economics from injections. Product mix therefore determines how many patients a given capacity base can serve.

Novo is expanding in Denmark, the United States, France, Brazil, China and Ireland. The three former Catalent fill-finish sites acquired in late 2024 increased global flexibility and brought more capacity under Novo's control, but they also require integration and quality-system transition. The company says the US semaglutide shortage was resolved in early 2025, yet its annual report continues to classify capacity and supply chain as a principal risk because resource shortages, trade friction, local-manufacturing requirements and long lead times can disrupt supply. Quality failures are especially damaging: one plant issue can constrain a global brand, trigger remediation or recalls, and give a competitor durable prescription momentum ([2025 risk management](https://annualreport.novonordisk.com/2025/governance/risk-management.html)).

An investor should distinguish capacity installed from capacity productive. Buildings do not create supply until equipment is qualified, regulators approve lines, yields stabilize, trained staff are in place and devices and packaging are synchronized. The strategic objective is not maximum physical output; it is flexible, compliant output across injectable, high-dose and oral products at acceptable cost. The capital programme succeeds only if utilization, yield and market share justify the cash committed.

6. Pipeline and lifecycle management

Novo's pipeline must do three jobs: extend semaglutide, close the efficacy gap with tirzepatide, and build material franchises outside semaglutide.

Semaglutide lifecycle. Wegovy pill launched in the US in January 2026 and expanded to the UK and UAE; the European Commission approved both the pill and the 7.2 mg injection in July. Novo reported more than five million cumulative US pill prescriptions by mid-July and approximately 265,000 weekly pill prescriptions, evidence that oral delivery can expand the category rather than merely switch existing injectable users. The latest clinical extension is paediatric: STEP Young met its primary endpoint in children aged 6 to under 12, with no new growth or pubertal-development signal disclosed in the headline result ([7 September 2026 announcement](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916600)). These assets deepen the franchise, but they also increase dependence on the same molecule and patent family.

CagriSema. This once-weekly fixed combination adds the amylin analogue cagrilintide to semaglutide. It has completed pivotal obesity studies, is filed in the United States, and has a regulatory decision expected in the fourth quarter of 2026. It has shown substantial absolute weight loss and encouraging glucose control, including superiority to its individual components in type 2 diabetes studies. The counterweight is the failed head-to-head non-inferiority result versus tirzepatide. Ongoing higher-dose and outcomes trials may improve positioning, but approval alone would not prove commercial superiority.

Zenagamtide, formerly amycretin. This is a single-molecule GLP-1/amylin agonist available in subcutaneous and oral development programmes. Phase 2 diabetes data showed weight loss up to 14.6% at 36 weeks at the highest tested dose, alongside glucose improvement, and Novo moved the asset toward phase 3 ([June 2026 results](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916559)). It offers a credible next-generation mechanism, yet remains exposed to dose selection, tolerability, manufacturing and phase 3

replication risk.

Broader cardiometabolic pipeline. The current pipeline includes obesity, diabetes, cardiovascular and liver-disease assets, including cagrilintide, efruxifermin in MASH and other early mechanisms. Portfolio breadth matters, but recent setbacks show why probability adjustment is essential. In Q2 2026 Novo disclosed that the ZEUS cardiovascular trial of ziltivekimab missed its primary endpoint and that pipeline impairments included monlunabant. A long candidate list is not equivalent to durable future earnings.

Rare disease. Denecimig, a bispecific antibody designed to mimic factor VIII activity, has been submitted in the US and EU and is being studied from weekly to monthly prophylaxis. Long-term FRONTIER data reported strong bleed prevention without a neutralising-antibody signal in the disclosed interim dataset ([July 2026 update](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916579)). Alhemo has expanded approved use, Sogroya is widening geographically, and etavopivat remains in phase 3 for sickle-cell disease. These assets can improve the segment's quality, but their economic contribution begins from a small base and faces established specialist competitors.

7. Pricing, reimbursement and access

Demand is large; paid access is the gating variable. In the United States, PBMs and managed-care plans negotiate rebates in exchange for formulary position or market-share performance. Medicare, Medicaid, 340B discounts, wholesaler charge-backs and patient assistance create additional deductions. This means prescription volume, list price and reported net sales can move differently. Novo's 2025 Form 20-F says average US portfolio prices after rebates declined in 2025 and expects continued pressure from payer consolidation, higher-rebate channels, direct cash sales and competition.

Government policy adds another layer. Negotiated Medicare Part D prices for Ozempic, Rybelsus and Wegovy are scheduled to take effect in 2027. A separate US agreement expanded semaglutide access at lower cost through Medicare, Medicaid and self-pay channels in 2026. Better coverage can increase volumes and persistence, but the incremental prescription may carry a lower net price. The investment question is therefore net revenue and profit per treated patient, not simply prescriptions.

Outside the US, national health-technology assessments, budget caps, reference pricing and tender systems can slow launch and constrain price. Obesity reimbursement remains less mature than diabetes reimbursement in many countries. Novo can first serve private-pay demand and then pursue public coverage, but that sequence creates uneven country economics. Evidence that treatment reduces cardiovascular events, kidney outcomes or other costly complications can strengthen payer value arguments, while long treatment duration raises budget-impact concerns.

Rebate accounting can also obscure the underlying trajectory. The TTM reported figures include an unusual 340B provision reversal, while Q2 2026 also contained a non-cash impairment of pipeline assets. The later earnings model must separate recurring price-volume-mix economics from these events. A strong reported TTM margin is not, by itself, evidence that current net pricing is improving.

8. Capital allocation

Novo's capital hierarchy is internally coherent: fund R&D and productive capacity first, pay a growing dividend, use business development to strengthen the pipeline, and treat buybacks as flexible. The tension is that all four demands are currently material.

Capital spending rose from DKK 6,335 million in 2021 to DKK 60,140 million in 2025 as Novo attempted to catch up with incretin demand and internalize more fill-finish capacity. Cash paid for dividends was DKK 51,975 million in FY2025 and the same amount on the TTM cash-paid basis; repurchases were DKK 5,899 million in the TTM. Average diluted shares fell from 4,605.3 million in FY2021 to 4,447.7 million in FY2025, showing that repurchases have more than offset employee-plan dilution over that period. However, buybacks are subordinate to manufacturing and pipeline needs, and should not be assumed to continue at the old pace.

The balance-sheet move from modest net cash in 2023 to material net debt by mid-2026 largely reflects acquisition and capacity investment. That is not automatically poor allocation: control of scarce fill-finish assets may protect a much larger franchise. The test is prospective return on incremental capital. If added capacity supports durable volume at attractive net prices, today's FCF compression is investment. If Lilly gains share, oral competitors commoditize access or dose economics disappoint, the same assets become a drag.

9. Share class, foundation ownership and governance

This report covers the Copenhagen B ordinary share, not the US ADR. A and B shares have the same DKK 0.10 denomination and, in practice, receive the same dividend per share. Each A share carries 100 votes and each B share 10 votes. The unlisted A shares are held by Novo Holdings, which is wholly owned by the Novo Nordisk Foundation; the Foundation's articles prevent divestment of those A shares. As of 30 June 2026, Novo Holdings controlled 77.3% of votes while owning 28.1% of capital. Public and institutional investors therefore own most of the economic capital but cannot determine control ([Q2 2026 ownership presentation](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/pdfs/financial-results/2026/Q2-2026-Full%20presentation.pdf); [share structure](https://www.novonordisk.com/investors/stock-information/share-and-ownership-structure.html)).

Foundation control can support patient, long-duration investment in science and manufacturing and reduce pressure for short-term financial engineering. It also weakens the market for corporate control and limits minority investors' ability to change strategic direction or the board. This became tangible in 2025, when disagreement over the pace and extent of board renewal led to an extraordinary general meeting and extensive board change. The current governance page reports a majority of shareholder-elected directors as independent, but several directors remain linked to Novo Holdings or the Foundation. Investors should treat the controller's objectives and board-renewal process as a real governance variable, not a decorative ownership note.

10. Key risks and what matters most

- **Semaglutide concentration.** Ozempic, Rybelsus and Wegovy drive most sales and almost all economic momentum. A safety issue, supply interruption, patent defeat, label restriction or sharp price reset would affect multiple brands at once.

- **Lilly and next-generation competition.** Tirzepatide has already challenged prescription leadership, and CagriSema failed non-inferiority in the key head-to-head obesity study. Oral small molecules and multi-agonists can compete on efficacy, convenience and cost.

- **Net-price erosion.** Payers can exchange broader access for lower price. Medicare negotiation from 2027, PBM consolidation, direct cash channels and formulary competition could make volume growth look healthier than revenue or profit growth.

- **Pipeline execution.** CagriSema's approval and positioning, zenagamtide phase 3 replication, outcomes evidence, and rare-disease launches are not assured. ZEUS and monlunabant illustrate the cost of scientific failure.

- **Manufacturing and utilization.** API and fill-finish projects take years. Qualification delays or GMP problems constrain supply; overbuilding after a share loss depresses capital returns. Integration of the former Catalent sites adds operational complexity.

- **Cash-conversion pressure.** The franchise still generates substantial cash, but capex has absorbed a much larger share of operating cash flow and leverage has increased. The later analysis must determine when capacity investment normalizes and what sustaining capex remains.

- **Patent, compounding and biosimilar exposure.** Core semaglutide patent protection varies by jurisdiction, with important expiries arriving earlier in some countries than in the US and Europe. Unapproved compounding and eventual lawful generic or biosimilar competition can undermine price and brand control.

- **Rebate and legal-accounting volatility.** US sales deductions depend on estimates of payer mix, claims timing and legal interpretation. The 340B reversal demonstrates that reported sales and profit can move materially without a corresponding change in current prescriptions.

- **Foundation control.** Long-term ownership is potentially valuable, but minority holders cannot dislodge the controller. Strategic, leadership or board decisions may prioritize stability, public-health objectives or Foundation preferences over the outcome a purely financial owner would choose.

- **Rare disease is not yet a hedge.** The segment is strategically useful but economically too small and currently too low-margin to protect group earnings from a major metabolic-franchise setback.

Investor orientation: the central question

Novo Nordisk remains a high-margin, cash-generative leader with exceptional incretin know-how, an integrated supply chain, durable physician relationships and a very large untreated population. The old thesis-scarce semaglutide supply meeting explosive demand-is no longer enough. The next phase is a contest of net price, share, route of administration, outcomes evidence and manufacturing efficiency against Lilly and a widening field.

The central underwriting question is therefore whether Novo can turn a broader Wegovy franchise and a credible amylin-based pipeline into durable, profitable patient growth faster than competition and payer pressure compress incremental economics. The decisive evidence will be net sales per patient rather than scripts alone; branded obesity and diabetes share; CagriSema's regulatory label and real-world positioning; zenagamtide phase 3 data; API and fill-finish yields; capex normalization; and rare disease's ability to become more than a small diversification asset. Those issues-not the historic prestige of the franchise-should drive the later ER2 forecast and valuation.

Appendix M - Management Assessment

Novo Nordisk - Management Assessment

Assessment date: 9 September 2026 **Security:** Novo Nordisk A/S Copenhagen B share (NVO.CO; provider symbol NOVO-B.CO) **Management gate: YELLOW**

Novo Nordisk is a foreign private issuer, so a US DEF 14A is not the controlling governance source. This assessment uses the live-fetched 2025 Annual Report and Form 20-F, 2025 Remuneration Report, current corporate-governance pages, 2026 AGM materials, company releases and live FMP transcript pulls. Capital-allocation figures come from the reviewed `data_package.md`, Sections 7 and 9, as instructed.

1. Who is running the company

Maziar “Mike” Doustdar became president and CEO on 7 August 2025. He joined Novo Nordisk in 1992 and moved through finance, IT, logistics, operations and marketing before leading Near East, Southeast Asia and, from 2015, International Operations. By 2025 his remit covered every commercial unit outside the US; the company says International Operations sales more than doubled to about DKK 112 billion in 2024 during his leadership. His commercial apprenticeship is relevant because Novo’s present problem is not discovering demand but regaining share, widening access and adapting to a consumer-influenced obesity market. As CEO, he owns the 2025 transformation, the narrowed diabetes/obesity strategy, the lower-price and direct-channel response in the US, and the post-transition business-development programme. [CEO biography](https://www.novonordisk.com/about/executive-management/maziar-mike-doustdar.html)

Karsten Munk Knudsen has been CFO since February 2018. He joined the group in 1999, held finance roles across the value chain, led US Finance & IT and Corporate Finance, and later added Legal, Procurement, Global Solutions and Corporate Strategy. That continuity matters: Knudsen owns the financing and cash-return framework through the Catalent purchase, capacity build and current retrenchment. His long tenure is the strongest stabiliser in a heavily renewed leadership group. [CFO biography](https://www.novonordisk.com/about/executive-management/karsten-munk-knudsen.html)

The material operating leaders are newer. Jamey Millar joined as EVP US Operations on 5 February 2026 after Optum and GSK; Emil Kongshøj Larsen became EVP International Operations in August 2025; Martin Holst Lange took the combined R&D organisation and CSO role in August 2025; Kasper Bødker Mejlvang became EVP CMC & Product Supply on 1 January 2026; and Hong Chow joined as EVP Product & Portfolio Strategy on 15 February 2026. The roles fit the problem set-US payer strategy, international execution, pipeline selection and manufacturing-but most have not completed a full planning cycle together. [2025 Form 20-F, management biographies](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/irmaterial/annual_report/2026/novo-nordisk-form-20-f-2025.pdf)

The board has 12 members: eight shareholder-elected and four employee-elected. Five of the eight shareholder-elected directors are now independent. Chair Lars Rebien Sørensen is not independent: he was Novo’s CEO from 2000 to 2016 and also chairs the Novo Nordisk Foundation. Independent vice chair Cees de Jong chairs remuneration and sits on audit, but the company does not designate a formal lead independent director. Stephan Engels, an independent financial expert, chairs audit; Helena Saxon added independent finance and investment experience; Jan van de Winkel chairs the R&D committee; and Ramona Sequeira adds global pharmaceutical commercial experience. The 2026 AGM restored majority independence after the November 2025 extraordinary meeting had left only two of five shareholder-elected directors independent. The renewed skills are credible, but the speed and controller-led nature of the reset are a governance warning, not proof of stronger oversight. [Current governance](https://www.novonordisk.com/about/corporate-governance.html) [2026 AGM resolutions](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916520)

2. Tenure and track record

Doustdar has been CEO for only about 13 months. He is not a newcomer to Novo, but he has not been in the top job long enough to claim the current capital cycle’s results. Three decisions define his early record.

First, in September 2025 he launched the largest workforce reduction in company history-about 9,000 positions-and simplified governance and R&D. Novo incurred roughly DKK 8 billion of net 2025 restructuring cost and targets DKK 8 billion of annualised savings from 2026, redirected to growth. FY2025 sales were DKK 309.064 billion, up 10.3% at CER, while operating profit was DKK 127.658 billion, down 0.5% reported and up 6% at CER; absent restructuring, management says operating profit would have grown 13% at CER. Q1 2026 employment was almost 10,000 lower year over year. This is fast

execution, but not yet value creation: reinvesting all savings means investors still need proof in revenue, margin and ROIC.

Second, he changed commercial execution from a mainly physician-and-reimbursement model toward direct cash access, telehealth, retail partnerships and more price points. The transition initially exposed pain: Q1 2026 adjusted sales fell 4% at CER, including 10%-15% US Ozempic price erosion, but Q2 adjusted sales rose 7% and management raised 2026 adjusted sales and operating-profit guidance to 0% to minus 6%. Wegovy pill and high-dose Wegovy are real launch assets. Still, Novo has not yet shown that greater volume will offset lower realised prices and the pill's lower gross margin.

Third, Doustdar endorsed a focused but expensive portfolio reset. Novo completed Akero for USD 4.7 billion plus a CVR of up to USD 0.5 billion and licensed Omeros's zaltenibart for USD 340 million upfront/near term and up to USD 2.1 billion in milestones. These moves fit obesity-related comorbidities and rare blood disorders, but neither contributes current product revenue. Meanwhile, Q2 2026 included DKK 6.3 billion of pipeline impairments, including DKK 4.0 billion for monlunabant, and the ZEUS ziltivekimab trial missed its primary endpoint. Management disclosed the failures and pruned programmes rather than hiding them; the economic return on the new bets remains unproved.

Knudsen's record is mixed but disciplined at the framework level. He preserved 30 consecutive dividend increases, let buybacks fall sharply when Catalent and capacity consumed cash, and maintained modest leverage. The unresolved issue is return on the inherited USD 11.7 billion Catalent-site purchase and the concurrent manufacturing build. The CFO can explain the hierarchy-invest in the business, pay a consistent dividend, add pipeline assets, then repurchase shares-but a hierarchy is not evidence that recent large projects cleared an attractive per-share return hurdle.

3. Capital allocation behaviour

Year	PP&E capex, DKK bn	Capex / sales	R&D, DKK bn	R&D / sales	Buybacks, DKK bn	FY dividend, DKK bn	M&A / BD cash, DKK bn
2021	6.335	4.5%	17.772	12.6%	19.447	23.711	18.283
2022	12.146	6.9%	24.047	13.6%	24.086	27.950	7.075
2023	25.806	11.1%	32.443	14.0%	29.924	41.987	0.000
2024	47.164	16.2%	48.062	16.6%	20.181	50.683	82.163
2025	60.140	19.5%	52.039	16.8%	1.388	51.975	29.973

The investment pattern is coherent with the stated strategy. Capex rose almost tenfold from 2021 to 2025 as Novo built API and fill-finish capacity; R&D rose from 12.6% to 16.8% of sales; and business development concentrated on obesity, MASH and rare disease. Management guides about DKK 55 billion of 2026 PP&E capex and says the slope should decline as major projects finish. This is the correct supply response to past shortages, but capital intensity has arrived just as growth and pricing softened. The return test is therefore capacity utilisation and cash conversion, not whether facilities open.

M&A outcomes are mostly too early to score. The three Catalent sites cost DKK 82.163 billion cash in 2024 and should add capacity from 2026; FY2025 still bore depreciation, integration and financing drag. Akero represents most of the DKK 29.973 billion 2025 intangible/BD cash proxy and remains a development-stage wager. Omeros sensibly shifts much consideration to milestones, but also lacks commercial proof. There is no established pattern of serial write-offs, yet the DKK 6.3 billion 2026 pipeline impairment shows that acquisition and licensing discipline must be watched.

Buybacks look flexible rather than formulaically maximised: DKK 19.4-29.9 billion annually in 2021-2023, DKK 20.2 billion in 2024, then only DKK 1.4 billion in 2025. The 2026 programme is "up to" DKK 15 billion and explicitly subordinate to material BD. Diluted shares fell from 4,605.3 million in 2021 to 4,447.7 million in 2025, so repurchases more than offset employee issuance. There is, however, no disclosed valuation threshold demonstrating opportunistic repurchase; the programme is flexible but not visibly price-sensitive. Dividends are the cleaner signal: the FY2025 dividend rose 2.6% to DKK 11.70 per share, the thirtieth consecutive increase.

4. Compensation alignment

For 2025, Doustdar received DKK 20.7 million, including DKK 10.9 million of variable remuneration, while Knudsen received DKK 18.7 million, including DKK 7.1 million variable. STIP is 75% corporate and 25% individual; the corporate portion weights sales growth, operating-profit growth and strategic/sustainability/innovation goals. LTIP has a three-year performance period and a subsequent two-year holding period, but its scorecard is one-third average sales growth, one-third average operating-profit growth and one-third strategic initiatives. It contains no explicit ROIC, free-cash-flow, EPS-per-share or relative-TSR measure. That is a material design weakness during a DKK 100-plus-billion combined capacity/BD cycle: scale and operating profit can rise while incremental returns fall. [2025 Remuneration

Report](https://annualreport.novonordisk.com/2025/_assets/downloads/novo-nordisk-remuneration-report-2025.pdf)

Actual ownership is meaningful. At 31 December 2025, Doustdar held 107,569 B shares worth DKK 35.0 million and Knudsen held 238,828 worth DKK 77.7 million; both met requirements of three times salary for the CEO and 1.5 times salary for EVPs. These are owned shares rather than merely unvested grants. Doustdar sold/transferred only 1,852 shares in 2025 and Knudsen sold none, so there was no clustered registered-executive exit signal.

Share-based compensation is disciplined: DKK 1.040 billion (0.74% of sales) in 2021, DKK 1.539 billion (0.87%) in 2022, DKK 2.149 billion (0.93%) in 2023, DKK 2.289 billion (0.79%) in 2024 and DKK 1.435 billion (0.46%) in 2025. The 2023-2025 figures are issuer-reported; 2021-2022 use the live FMP cash-flow series. Net share count declined, so SBC is not chronic dilution.

The board may apply malus and clawback and may override formulaic incentive outcomes; it reported no basis for clawback in 2025. Novo also files insider-trading rules and enforces closed periods. The reviewed remuneration report and 20-F did not state an explicit personal hedging or pledging prohibition, so that protection should be treated as undisclosed rather than assumed.

5. Disclosure quality and candour

The eight-text-call review covers Q2 2024 through Q1 2026; for the current Q2 2026 quarter, the FMP transcript endpoint returned no text, so the official release and presentation were used as the current-period substitute. Literal “headwind(s)” appeared in three of the eight transcript files, five times total. More importantly, management usually used concrete language-lower realised prices, market-share loss, competition, rebate adjustments and supply limits-rather than euphemisms.

Quarter	Hard issue and response quality
Q2 2024	On Wegovy pricing, management explained Medicaid/channel mix but declined detailed pricing commentary. Partly direct, partly evasive.
Q3 2024	R&D explicitly said its 25% CagriSema expectation came from modelling with “no new data.” Transparent caveat, but confidence proved too high.
Q4 2024	After REDEFINE 1 delivered 22.7% rather than the modelled 25%, management discussed flexible dosing and tolerability, yet continued to frame CagriSema confidently.
Q1 2025	Management cut guidance and named lower branded penetration and rapid US compounding rather than masking the issue.
Q2 2025	A second, much larger guidance cut identified slower US expansion, Ozempic/Wegovy pressure and weak IO penetration; credibility nevertheless deteriorated.
Q3 2025	Asked about nine points of global GLP-1 share loss, Doustdar said plainly he did not like losing share, but supplied initiatives rather than a numerical recovery bridge.
Q4 2025	Knudsen disclosed that the pill’s gross margin is below injectable Wegovy’s. Yet R&D expressed optimism on REDEFINE 4 only 19 days before it failed non-inferiority.
Q1 2026	Knudsen quantified US Ozempic erosion at 10%-15% and Wegovy-pill launch inventory at about USD 150 million; price elasticity and longer-run margin remained unquantified.

Guidance is the largest candour blemish. Novo opened 2025 at 16%-24% CER sales growth and 19%-27% operating-profit growth, cut to 13%-21% and 16%-24% in May, then to 8%-14% and 10%-16% in July, and finally to 8%-11% and 4%-7% in November after restructuring. Actual 10% sales and 6% operating-profit growth landed within the final range, but only after serial resets. In 2026, Doustdar started with adjusted sales and operating-profit guidance of minus 5% to minus 13%, lifted both ranges one point in Q1 and to 0% to minus 6% in Q2. The raises are encouraging, but also suggest the reset began conservatively after the prior year’s downgrade cycle.

Voluntary disclosure is above average on selected load-bearing items: exact prescription counts, market-share snapshots, price-erosion bands, launch inventory, capex, free cash flow, savings and pipeline impairments. It is weaker where investors most need a bridge-price/volume by channel, return thresholds on manufacturing and M&A, and a quantified path from market-share stabilisation to sustainable margin.

6. Strategic coherence

Novo states: **“Our strategy focuses on leading in Obesity, Diabetes & related comorbidities, through patient centricity, innovation and affordable access,”** while retaining leadership in rare blood and endocrine disorders. It explicitly shifted from building standalone CVD, CKD and MASH areas to going deeper in core obesity and diabetes. [Purpose, strategy and culture](https://annualreport.novonordisk.com/2025/introducing-novo-nordisk/purpose-strategy-and-culture.html)

Investment follows the statement: manufacturing, oral and high-dose semaglutide, next-generation obesity compounds, access channels, Akero MASH and selected rare-disease assets. Management also names competition, share loss, generic entry and lower realised prices directly. This is a coherent direction, not a collection of unrelated pivots. The gap is the destination: the prior Strategic Aspirations ended in 2025 and new long-term targets are scheduled for the 21 September 2026 Capital Markets Day. Until management publishes measurable five-to-ten-year capital and per-share objectives, “impact growth” remains more philosophy than underwriting contract.

7. Governance flags

Novo Holdings, wholly owned by the Novo Nordisk Foundation, controls **77.3% of votes with 28.1% of capital** through super-voting unlisted A shares and B shares. Foundation ownership supports long-duration research and protects against short-term pressure, but Copenhagen B holders cannot change control. Three of eight shareholder-elected directors are non-independent due to Foundation/Novo Holdings associations; the chair simultaneously leads the Foundation. [2025 governance](https://annualreport.novonordisk.com/2025/governance/corporate-governance.html)

The clearest minority-holder risk is the 2024 related-party purchase of three Catalent fill-finish sites from Novo Holdings for USD 11.7 billion (DKK 82.146 billion cash before acquired cash effects). Novo’s board approved it and Evercore delivered a fairness opinion, but the transaction had no recourse to the seller and the 2025 closing adjustment was not final at year-end. The strategic rationale is strong; the controller relationship and still-unproved return make it a live governance test. Other related-party dealings were described as limited and market-priced. [Catalent transaction](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=167017)

The 2025 Form 20-F reports effective internal control over financial reporting, an unqualified auditor opinion, no material change in controls and no restatement. Akero was excluded from the year-end control assessment because it closed in December and represented 5% of assets and less than 1% of net profit; that is a normal scope exception to monitor. No material SEC enforcement was disclosed. The official 2025 ownership table shows no clustered CEO/CFO selling, and the reviewed 2026 company-announcement search found no contrary registered-executive pattern through the cutoff.

8. Peer comparison

CEO	Stewardship comparison with Doustdar
David Ricks, Eli Lilly, CEO since 2017	Clearly stronger five-year proof. Lilly’s pipeline prioritisation, tirzepatide execution and manufacturing scale have produced superior competitive momentum. Communication is generally more numerically anchored.
Pascal Soriot, AstraZeneca, CEO since 2012	Stronger long-cycle capital-allocation record and a clearer 2030 destination, albeit with a more acquisition-intensive model. His tenure provides evidence through multiple pipeline and patent cycles that Doustdar lacks.
Thomas Schinecker, Roche, CEO since 2023	Moderately stronger in-seat proof and broader portfolio diversification; Roche’s recent execution and guidance record are steadier. Novo is more focused and its CFO continuity is better than the CEO-tenure comparison suggests.

Doustdar ranks fourth of these four on five-year stewardship because he has only one year in the role, not because the early actions are necessarily inferior. His pre-CEO International Operations record is credible, and his willingness to acknowledge overstaffing, share loss and price pressure is positive. The burden of proof remains higher because Novo is simultaneously changing leadership, commercial architecture, R&D governance and capital intensity.

9. Management-gate verdict

YELLOW - investable but unresolved. Doustdar has the relevant commercial history, has acted quickly, owns meaningful shares and communicates more directly than the 2025 downgrade cycle might imply; Knudsen supplies valuable continuity and cash-allocation discipline. However, the CEO has not yet demonstrated five years of high-return stewardship, incentives omit ROIC/FCF/per-share measures, guidance credibility was damaged by serial 2025 cuts, and the Foundation-controlled board must prove that the related-party Catalent investment protects minority holders. The evidence does not support FAIL: dilution is low, controls are effective, failures are disclosed, leverage is manageable and strategy matches spending. It also does not support PASS today.

Upgrade to PASS if: (1) Novo finishes 2026 within the latest adjusted range and then delivers two years of stable/improving GLP-1 share and price-volume economics without another major reset; (2) capex declines as promised while Catalent/new capacity lift output, free cash flow and incremental ROIC; and (3) Akero/Omeros and the core obesity pipeline show risk-adjusted progress without another cluster of impairments, preferably alongside adding ROIC, FCF or per-share value to LTIP.

Downgrade to FAIL if: another material guidance reset reveals that channel pricing or demand was again poorly understood; Catalent/new capacity produces sustained cash-conversion or ROIC destruction; the controller drives another material related-party transaction without demonstrable minority-holder economics; or management repeats confident pipeline framing immediately before avoidable clinical or commercial disappointments without changing decision processes.

Appendix W - Moat and 2046 Durability

Novo Nordisk - Moat and 2046 Durability

Security: Novo Nordisk A/S Copenhagen B share (`NVO.CO`; provider symbol `NOVO-B.CO`) **Information cutoff:** 9 September 2026; W-stage completed 10 September 2026 **Evidence basis:** QFR/DR-reviewed data package, company primer, live FMP annual statements and Q1 2026 transcript, Novo Nordisk's 2025 Form 20-F and Q2 2026 materials, and Eli Lilly's 2025 Form 10-K and Q2 2026 results. Rare disease's completed competitive-dynamics and moat sections were incorporated when they became available; the Obesity and Diabetes care appendix remained a 100-byte in-progress stub and was not treated as evidence.

1. Moat taxonomy applied

Network effects - absent. Novo Nordisk does not become intrinsically more useful to each patient because more patients use its medicines. Large treated populations generate pharmacovigilance, real-world evidence and physician familiarity, but competitors can build the same assets and regulators do not award exclusivity for installed patient count. This is evidence scale, not a true network effect. It supports the Obesity and Diabetes care franchise and outcomes-label extensions, but should not be counted as a separate moat source.

Switching costs - moderate and clinical, not contractual. A stable chronic patient has reasons not to switch: titration, gastrointestinal tolerability, device familiarity, continuity of glucose control or weight loss, and the prescriber's comfort with a long safety and outcomes record. Specialists treating haemophilia or growth disorders also avoid casual changes in well-controlled patients. However, payer formulary changes, superior efficacy, shortages and lower out-of-pocket cost can force or motivate switching. Lilly overtook Wegovy in US total weekly obesity prescriptions in early 2025 and Ozempic in US weekly type 2 diabetes prescriptions during 2025, according to Novo's [2025 Form 20-F](https://www.sec.gov/Archives/edgar/data/353278/000035327826000012/nvo-20251231.htm). That is direct evidence that switching friction is meaningful but permeable.

Scale economies - strong in Obesity and Diabetes care, weaker in Rare disease. Novo combines peptide and protein engineering, clinical development, regulatory dossiers, active pharmaceutical ingredient production, sterile fill-finish or tableting, devices, packaging and distribution across roughly 170 countries. The 20-F identifies major integrated sites in Kalundborg, Hillerød, Clayton, Chartres, Tianjin and elsewhere, with multi-year projects whose individual announced costs run into tens of billions of DKK. Qualification, yield learning, good-manufacturing-practice systems and device synchronization make a greenfield attack slow and expensive. Scale also spreads global outcomes trials, medical affairs and payer contracting over very large metabolic volumes. The limitation is that Lilly is an equally credible scaled attacker: its [2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/59478/000059478260000013/lly-20251231.htm) lists a widening global injectable network and further capacity coming online. Novo's scale excludes most entrants; it does not immunize it from the best-capitalized peer.

Brand - strong but subordinate to clinical value and access. Ozempic and Wegovy have exceptional patient and physician recognition, and Novo's century-long diabetes heritage supports trust. The rapid US uptake of Wegovy pill - more than five million cumulative prescriptions and above 265,000 weekly prescriptions by mid-July 2026 - shows the franchise can transfer awareness into a new delivery format ([Q2 2026 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590)). Yet brands in prescription medicine do not override a better efficacy profile, a restrictive formulary or unavailable supply. CagriSema produced 23.0% weight loss versus 25.5% for tirzepatide and failed non-inferiority in REDEFINE 4 ([Novo announcement](https://www.novonordisk.com/content/nncorp/global/en/news-and-media/news-and-ir-materials/news-details.html?id=916501)). The brand lowers launch friction; it cannot rescue an undifferentiated molecule.

Regulatory barriers - strong industry barriers, only partly company-specific. Large trials, validated quality systems, pharmacovigilance and approvals create years of cost and execution risk before a rival earns reimbursable sales. Novo's long regulatory record and ability to run global cardiovascular, renal, diabetes and obesity outcomes programmes are therefore real advantages. But the same regime licenses Lilly and other qualified innovators, while abbreviated generic and biosimilar pathways lower barriers after exclusivity. Regulation protects the category's incumbents, not Novo alone, and government reimbursement rules also constrain Novo's price.

IP and patents - strong through the early 2030s, explicitly wasting thereafter. The 2025 Form 20-F states that the US compound patent for semaglutide brands Ozempic, Rybelsus and Wegovy expires in 2032. It also lists estimated protection to

2037 for CagriSema and cagrilintide and to 2040 in the US for Mim8/denecimig, with differing dates by market. Novo has defended semaglutide against ANDA filers and prevailed in a Chinese compound-patent appeal, but confidential settlements and jurisdiction-specific expiries show that legal protection is finite. By 2046, today's named late-stage assets will no longer constitute the moat. The durable claim must be that Novo can repeatedly create and commercialize replacements, not that semaglutide remains protected.

High-trust procurement and channel access - moderate to strong, but payer-controlled. Prescribers, health systems, national agencies and payers value outcomes evidence, reliable supply, safety monitoring and a counterparty able to serve large populations. Novo's subsidiaries, distributors and agents provide global reach, and its SELECT-era cardiometabolic evidence broadens the value proposition beyond weight loss. Rare-disease specialist relationships are even more concentrated and trust-sensitive. However, PBMs and governments aggregate purchasing power. Novo disclosed declining average US prices after rebates in 2025 and expects continued pressure from payer consolidation, Medicare/Medicaid mix, cash channels and competition. Access is a two-sided moat: Novo's evidence and supply earn consideration, but the channel can extract much of the surplus.

2. Per-segment moat

Obesity and Diabetes care - real five-year moat; conditional ten- and twenty-year moat. This segment generated 93.7% of FY2025 sales and 99.1% of Segment operating profit. Its protectable profit pool is the combination of patented incretin and insulin assets, longitudinal outcomes evidence, global clinical and payer access, integrated high-volume peptide manufacturing, devices and a trusted diabetes/obesity brand. A competitor attacks by delivering better efficacy or tolerability, an easier oral route, more reliable supply, or enough price advantage to win formulary preference. Lilly has already proven that this attack can work. Most smaller entrants still fail because they must clear science, pivotal trials, regulation, multistage manufacturing, global launch and reimbursement simultaneously. Durability is strong through five years, YELLOW over ten years because semaglutide US compound protection ends in 2032, and conditional over twenty years on pipeline renewal. The earliest break signals are sustained branded GLP-1 new-prescription and total-prescription share loss, net sales growing materially slower than treated volume, adjusted segment margin falling below the high-30s, or CagriSema/zenagamtide failing to produce differentiated phase 3 and outcomes evidence.

Rare disease - narrow product trust, no demonstrated segment-wide moat. Novo has specialist relationships, manufacturing know-how in recombinant proteins and haemophilia, and durable franchises such as NovoSeven and growth-hormone products. Newer convenience-led assets - weekly growth hormone and denecimig's less frequent prophylaxis - can create asset-specific switching friction. The completed segment work shows why that is only moderate protection: Roche's Hemlibra has already established scaled subcutaneous prophylaxis; Sanofi's Qfitlia competes on very infrequent dosing; gene therapy can remove treatment burden for eligible patients; and Pfizer/Ascendis weekly growth-hormone products contest Sogroya's convenience. The economics do not yet validate a broad moat: revenue was only DKK 19.6 billion in FY2025, and Segment operating margin fell from 47.4% in FY2021 (then labelled Biopharm) to 6.2% in FY2025 and about 2.3% on the TTM basis. Five-year durability is YELLOW because launches can rebuild the base, while ten- and twenty-year durability is presently weak. A failed denecimig or etavopivat launch, persistent low-single-digit margin, or continuing erosion of NovoSeven without replacement would break the case; those are also the earliest observable signs.

Blended implication. Rare disease's weakness does not mathematically dilute a strong segment by much because it was only 6.3% of FY2025 sales and less than 1% of profit. The greater blend risk is the opposite: the group is effectively one metabolic profit engine concentrated in semaglutide and exposed to one apex rival and powerful payers. Rare disease is not large or profitable enough to diversify a metabolic reset. Novo's consolidated moat is therefore approximately the Obesity and Diabetes care moat, with concentration reducing resilience even though the reported segment mix looks diversified.

3. Margin persistence evidence

Live FMP `/stable/income-statement` data for `NOVO-B.CO` reproduces the reviewed statutory figures. Consolidated operating margin averaged 42.9% over FY2016-FY2025, with a 41.3%-44.2% range - only 2.9 percentage points across a decade that included insulin price pressure, competitive launches, a pandemic, supply constraints and the first major obesity-capacity build.

Fiscal year	Revenue, DKK bn	Operating profit, DKK bn	Operating margin
2016	111.780	48.432	43.3%
2017	111.696	48.967	43.8%
2018	111.831	47.248	42.2%

Fiscal year	Revenue, DKK bn	Operating profit, DKK bn	Operating margin
2019	122.021	52.483	43.0%
2020	126.946	54.126	42.6%
2021	140.800	58.644	41.7%
2022	176.954	74.809	42.3%
2023	232.261	102.574	44.2%
2024	290.403	128.339	44.2%
2025	309.064	127.658	41.3%

The 2025 compression was meaningful but not a moat collapse: gross margin fell from 84.7% to 81.0% amid Catalent depreciation, capacity and restructuring costs, foreign exchange and mix. Q2 2026 adjusted operating margin was 42.5%, excluding the 340B reversal and DKK 6.3 billion pipeline impairment, but adjusted gross margin was a lower 78.2%. The group still converts differentiated medicines into unusually high operating profit; the cost of restoring supply and competing on access is now visible.

Segment operating margin	FY2021	FY2022	FY2023	FY2024	FY2025
Obesity and Diabetes care	40.7%	43.1%	46.3%	47.0%	43.7%
Rare disease / Biopharm in 2021	47.4%	36.1%	17.2%	3.3%	6.2%

This divergence is decisive. Obesity and Diabetes care shows persistent, even expanding, economics through visible competition before the 2025 normalization. Rare disease does not. The consolidated record proves a durable historical profit pool, but because the pool is concentrated, it does not by itself prove that post-semaglutide Novo will earn the same margin.

4. AI disruption stress test

Neither reportable segment is a prompt-to-output workflow. Patients pay for regulated molecules, verified clinical outcomes, reliable physical doses and medical supervision. A foundation model with access to trial data cannot synthesize, qualify, fill, package and distribute a peptide medicine, obtain approvals or replace longitudinal safety evidence. Obesity and Diabetes care is therefore **chokepoint economics**: proprietary molecules, regulated manufacturing lines, API yield, sterile capacity, devices, clinical outcomes datasets and payer access. AI can improve trial recruitment, target discovery, process control, pharmacovigilance and patient support, but it shifts the productivity of the platform rather than dissolving it.

Rare disease is also regulated and physical, yet it is relatively the **most AI-exposed** segment because small patient populations and concentrated biology allow AI-enabled competitors to improve target selection, trial identification and precision diagnosis, while gene and RNA modalities may leapfrog replacement proteins. Its current low margin leaves less evidence that Novo owns a self-reinforcing platform. Obesity and Diabetes care is the **most protected** segment because enormous trials, mass-market manufacturing, device integration and global reimbursement must all work together. The counterpoint comes from Lilly's 10-K, which explicitly says AI may broaden drug-discovery competition: AI increases the number and speed of credible candidates. It shortens the innovation clock, but clinical validation, regulation and production keep the clock measured in years, not software release cycles.

5. The 2046 test

Today's date is 10 September 2026; the forward test date is 10 September 2046. A credible 2046 business description is: *Novo Nordisk discovers, develops, manufactures and distributes chronic-disease medicines centered on obesity, diabetes and related cardiometabolic conditions, with a smaller rare-disease franchise. It sells successor incretin, amylin and multi-pathway medicines in injectable and oral forms, integrated with proprietary delivery devices and evidence-based patient-management services. Physicians prescribe them; public and private payers, health systems, pharmacies and patients fund them. Legacy semaglutide and much of conventional insulin have become lower-price or biosimilarized products. The former Obesity and Diabetes care segment has broadened into cardiometabolic medicine, including obesity complications and liver or cardiovascular indications; Rare disease survives as a specialist portfolio but remains secondary unless denecimig and later replacements establish a repeatable franchise.*

In that successful 2046, operating margin is directionally **lower than the 41%-44% historical range, plausibly in the high-30s**, because patent cycling, payer bargaining, oral small-molecule competition and a larger manufacturing base absorb more economics. It remains exceptional because Novo is still one of a small number of companies able to turn protein/peptide

science into globally approved, reliably supplied, outcomes-backed chronic therapies at enormous scale. The surviving moat is not a semaglutide patent. It is the renewal system: protein engineering, trial execution, regulatory and payer credibility, process/yield expertise, devices, capacity and distribution.

That description is specific, but not yet sufficiently evidenced to PASS. Semaglutide's US compound patent expires in 2032, CagriSema's disclosed protection extends only to about 2037, and the February 2026 head-to-head result showed that Novo's leading near-term replacement did not match tirzepatide on the primary efficacy test. Zenagamtide is scientifically credible - phase 2 diabetes data showed up to 14.6% weight loss and Novo planned phase 3 ([June 2026 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916559)) - but it is not yet a validated commercial replacement.

Bear 2046: Novo becomes a mature branded-biologics manufacturer whose best assets are repeatedly outperformed by dual/triple agonists, convenient oral small molecules and later biosimilars. Payers use several therapeutically substitutable choices to reset net prices. Semaglutide cash flows decay faster than new products scale, the rare-disease portfolio stays subscale, and large factories earn lower utilization and returns. Operating margin falls toward the 20s or low-30s. The mechanism is pipeline replacement failure plus commoditization and payer disintermediation of brand - not AI replacing medicine. I assign this bear path roughly **35% plausibility**: too high for PASS, but not the base case given Novo's century of renewal, decade of margin persistence and continuing pipeline/capacity depth.

6. Competitive threat inventory

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
Lilly and next-generation incretins	Better efficacy, oral convenience, capacity and payer concessions take prescriptions and net price	Obesity and Diabetes care	GLP-1 NBRx/TRx and volume share; CagriSema/zenagamtide data; formulary position	High
Patent cliff, biosimilars and lawful or unlawful copies	Semaglutide exclusivity erodes by jurisdiction; cheaper substitutes weaken brand economics	Obesity and Diabetes care; selected rare assets	Patent decisions/settlements; biosimilar approvals; branded net sales after 2030	High over 10 years
Payer price reset plus capacity under-utilization	Broader access comes with lower rebates-adjusted price while long-lead assets arrive into slower share	Primarily Obesity and Diabetes care	Net sales per patient; adjusted gross/segment margin; capex and utilization	High

7. Pricing power verification

Observable evidence does **not** support classic pricing power. Novo's 20-F says average US portfolio prices after rebates declined in 2025 and expects continued pressure. The live Q1 2026 FMP transcript gave a specific Ozempic US erosion range of roughly 10%-15%; management described price as a function of volume uptake and framed Wegovy price reduction as an investment in access. Q2 adjusted sales rose 7% at constant exchange rates because of GLP-1 volume and favourable rebate adjustments, while lower realised prices remained an offset. Wegovy pill's prescription uptake demonstrates adoption, not the ability to raise price without churn.

Gross-margin evidence is similarly mixed: 84.7% in FY2024, 81.0% in FY2025 and 78.2% adjusted in Q2 2026. Some compression reflects temporary depreciation, capacity and mix rather than pure price, but it means pricing has not fully offset investment and competitive costs. The reviewed sources disclose payer rebates, formulary competition, government negotiation and direct cash channels, not multi-year customer price escalators or minimum-volume commitments. Rare-disease products can command premium prices where outcomes are differentiated, yet the segment's 6.2% FY2025 margin provides no segment-wide verification. Novo has **volume elasticity, access power and differentiated-product economics; it does not currently have clean price-taking power**. The moat must survive through innovation, scale and cost per dose, not repeated price increases.

8. Moat verdict

Moat gate: YELLOW. Novo has a concrete and observable moat today: decade-long 41%-44% consolidated operating margins, a 43.7% FY2025 metabolic Segment operating margin, regulated science, outcomes evidence, integrated peptide/device manufacturing and global trust. The unresolved durability question is whether that platform can replace semaglutide before patent and payer pressure outrun pipeline renewal; Lilly's share gains and CagriSema's failed non-inferiority test make this a live issue rather than a remote risk. Rare disease does not currently diversify the profit pool.

2046 test: YELLOW. A specific high-return 2046 Novo can be described, but it depends on at least one post-semaglutide product generation not yet validated and likely carries a lower margin than today. Upgrade both gates to PASS if next-generation assets establish differentiated phase 3/outcomes performance, GLP-1 share stabilizes while volume expands, and normalized metabolic margin remains at or above roughly 40% through lower net prices. Downgrade to FAIL if net sales per treated patient and share fall together for multiple periods, normalized metabolic margin settles below the mid-30s, or no credible post-2032 franchise reaches late-stage validation by 2029-2030.

Bounded conclusion: Novo's moat is stronger than a patent portfolio but weaker than an impregnable franchise. It can withstand ordinary biotech entrants; it is already being penetrated by a peer with comparable science, manufacturing and channel power. That earns YELLOW, not a diplomatic PASS and not a historical-margin-blind FAIL.

Appendix B1 - Obesity and Diabetes Care

Obesity and Diabetes care - Segment Deep Dive

Run ID: `pulse-cio-20260909T220234+0800` Information cutoff: 2026-09-09 22:02:34 SGT Forecast anchor: TTM ended 2026-06-30 Forecast horizon: 2031-06-30, exactly five calendar years Currency: DKK billions unless stated otherwise Exact profit basis: **Segment operating profit**

0. Segment boundary and taxonomy note

Novo Nordisk's `Obesity and Diabetes care` reportable segment comprises GLP-1 diabetes medicines, insulin, other diabetes products and obesity medicines. Its perimeter is stable throughout the five-year financial history. The only recent changes are inside the segment: H1 2026 introduced `Wegovy pill` as a new obesity-product line and renamed the diabetes oral row `Ozempic pill / Rybelsus`. The FY2022 taxonomy boundary applies to the other reportable segment, when Biopharm became Rare disease; it does not break this segment's comparability. Commercial geography changed in 2025, but geography is not an IFRS segment and is not used to create artificial profit units. [data_package §1, reporting-structure paragraph and taxonomy note]

1. What this segment actually is

Obesity and Diabetes care is a chronic-disease medicines franchise built around incretin biology and insulin. It sells branded prescription therapies to people with type 2 diabetes, obesity or overweight with qualifying comorbidities. The economic customer is not simply the patient. Prescribers choose among clinically appropriate treatments, wholesalers and pharmacies distribute them, employers and government or commercial health plans determine access, and pharmacy-benefit managers negotiate rebates. Consequently, the revenue equation is treated patients multiplied by persistence and dose, then multiplied by net realised price after rebates, discounts and statutory programmes. List price is not net revenue.

The diabetes portfolio has three economic layers. First, Ozempic injectable and the Rybelsus / Ozempic-pill oral franchise are the high-value growth core. Second, Victoza and several daily or older-generation insulins are mature or declining assets. Third, long-duration innovation such as once-weekly Awiqli can defend Novo's insulin position even when diabetes care increasingly shifts toward incretins. Obesity care is centered on the Wegovy semaglutide franchise. The franchise now spans the established 2.4mg injection, a higher-dose injection and an oral pill. Saxenda is the declining liraglutide predecessor.

Pricing varies sharply by geography and channel. In the US, the company trades gross price for formulary access and patient volume through rebates, direct cash offers and public-programme pricing. International markets tend to carry lower price but can provide broader access and longer volume runways. The H1 2026 340B provision reversal demonstrates why quarterly reported sales are not a clean price signal: DKK 26.760bn was reversed at group level, DKK 25.514bn inside this segment, even though the event did not represent recurring patient demand. [data_package §4, post-table note]

The go-to-market advantage is therefore a system, not one molecule. Novo must produce peptide active ingredient, fill pens, make tablets, secure reimbursement, educate prescribers, support titration and keep patients on therapy. An oral product can recruit injection-averse patients and broaden primary-care use, but it may have lower gross margin and must compete with Lilly's small-molecule oral GLP-1. An injectable can support stronger efficacy and established outcomes evidence but imposes device and fill-finish capacity requirements. The segment's five-year result will depend on whether Novo can use format breadth to grow the treated population faster than net prices decline.

2. Current economics: reported TTM, normalized operating anchor and mix

The QFR-sealed TTM ended 30 June 2026 contains DKK 308.993bn of segment sales: DKK 218.947bn diabetes care and DKK 90.046bn obesity care. Exact **Segment operating profit** was DKK 141.624bn, a reported margin of 45.8%. These numbers are statutory segment history and are not overwritten. [data_package §3a, TTM bridge row 1; §4 Longest clean history rows Total diabetes care and Total obesity care]

The TTM is event-heavy. H1 2026 reported revenue includes a DKK 25.514bn segment allocation of the non-recurring 340B provision reversal. Removing that disclosed sales-deduction reversal reduces both revenue and Segment operating profit by DKK 25.514bn because the item entered the income statement through revenue with no associated product cost; it yields a DKK 283.479bn operating revenue anchor and DKK 116.110bn of profit, or 41.0%. Q2 also contains DKK 6.328bn of group pipeline impairments. DKK 4.0bn is specifically identified as monlunabant, an obesity asset, and therefore belongs to this

segment's economic perimeter; adding back only that source-bound amount produces DKK 120.110bn and 42.4%. The remaining DKK 2.328bn is not allocated by reportable segment, so adding back the full group impairment is retained only as an upper sensitivity, producing DKK 122.438bn and 43.2%. The source-bound recurring-margin range is therefore 42.4%-43.2%; 41.0% is the deliberately conservative anchor before any impairment normalization, and 45.8% remains the exact reported metric. This treatment does not annualise the 340B reversal or silently assign the undisclosed DKK 2.328bn.

TTM bridge, DKK bn	Revenue	Segment operating profit	Margin	Treatment
QFR-sealed reported TTM	308.993	141.624	45.8%	Exact historical basis [data_package §3a TTM row 1]
Less segment 340B reversal	(25.514)	(25.514)	n/a	Non-recurring revenue and profit sensitivity [data_package §4 post-table note]
Conservative pre-impairment-normalization anchor	283.479	116.110	41.0%	Retains all Q2 impairment expense
Add back identified monlunabant impairment	-	4.000	1.4 pts	Source-bound obesity-asset normalization [data_package §5 note]
Source-bound recurring lower bound	283.479	120.110	42.4%	Removes only the impairment identified to this segment
Add back unallocated group-impairment sensitivity	-	2.328	0.8 pts	Upper-bound sensitivity; reportable-segment allocation is undisclosed
Recurring upper sensitivity	283.479	122.438	43.2%	Assumes all DKK 6.328bn of disclosed group impairment belonged here

The normalized revenue anchor is decomposed without inventing brand-level 340B allocations. Adjusted TTM GLP-1 diabetes is DKK 143.777bn, insulin DKK 49.980bn, other diabetes DKK 2.107bn and obesity care DKK 87.615bn. These values subtract the disclosed H1 adjustment at therapy-category level. Brand-level reported TTM mix remains useful context: Ozempic injectable DKK 134.424bn, Rybelsus / Ozempic pill DKK 21.088bn and Victoza DKK 4.209bn; Wegovy injectable DKK 82.215bn, Wegovy pill DKK 5.474bn and residual obesity products DKK 2.357bn. Because the package does not allocate the adjustment among those brands, these reported brand values are not summed into the normalized model. [data_package §4 Longest clean history rows 1-8]

The segment was 93.7% of FY2025 group revenue and generated DKK 126.446bn of FY2025 Segment operating profit. FY2025 margin was 43.7%, down from 47.0% in FY2024. The economics are therefore already those of a very large franchise: the question is no longer whether semaglutide can create a market, but how much pricing, competition and reinvestment the franchise can absorb.

Capital intensity is rising even though segment assets are not separately disclosed. Group PP&E capex increased from DKK 6.335bn in FY2021 to DKK 60.140bn in FY2025, and TTM PP&E capex was DKK 56.043bn. Group R&D was DKK 52.039bn in FY2025 and adjusted H1 2026 R&D was DKK 21.743bn. None is allocated to the segment in issuer reporting, so this appendix does not fabricate a segment capex or R&D ratio. Peptide API, fill-finish, devices and tablet capacity require years of investment before incremental sales appear. [data_package §0a Pharma KPI history; §10 true non-disclosures]

3. Unit economics

Revenue becomes profit through five linked levers. Patient volume comes first: new starts, titration to maintenance doses and persistence determine dose demand. Realised price after rebates comes second. Manufacturing yield and format come third. Portfolio mix between high-value incretins, lower-price insulin and declining legacy products is fourth. R&D and commercial access investment is fifth.

Manufacturing scale is a genuine advantage, but not a free one. Injectable semaglutide requires active ingredient, sterile fill-finish and pen-device capacity. Oral semaglutide removes the injection device but uses more active ingredient per dose and has a different formulation and tableting chain. Management explicitly said the Wegovy pill has a lower gross margin than injectable Wegovy. Oral share can therefore raise franchise revenue and expand access while diluting gross margin. [data_package §6 Obesity and Diabetes care, CFO product-margin row]

Gross-to-net is the most volatile part of US unit economics. A payor may accept broader access only after a lower net price, while direct cash channels exchange rebate complexity for lower visible price. Volume elasticity decides whether that trade

creates value. Management's formulation that price is a function of volume uptake is economically correct but not yet proven across a full reimbursement cycle. [data_package §6 Obesity and Diabetes care, CEO pricing row]

The 2027 Medicare maximum fair price is an additional step-down. CMS set a single negotiated price of USD 274 for a 30-day equivalent supply across Ozempic, Rybelsus and Wegovy, 71% below the USD 959 2024 list price, effective in 2027. The 71% figure must not be applied as a 71% revenue haircut because Novo's existing net price is already below list and the channel is only part of global sales. It is nevertheless a direction-of-travel signal and a reference point for commercial payors. [CMS 2027 negotiated-price fact sheet](https://www.cms.gov/files/document/fact-sheet-negotiated-prices-ipay-2027.pdf)

The Medicare GLP-1 Bridge partly offsets price with access. It gives eligible Part D beneficiaries access to selected GLP-1s from July 2026 through December 2027 at a USD 50 copay, outside normal Part D payment flow. Novo can gain covered lives and demand, but Lilly's products are included too. Access is an industry-volume tailwind, not an exclusive moat. [CMS Medicare GLP-1 Bridge](https://www.cms.gov/medicare/coverage/prescription-drug-coverage/medicare-glp-1-bridge)

Insulin has different economics. Volumes are durable because the medicine is essential, but price regulation, tendering and mix shifts constrain revenue. Awiqli may improve adherence and mix through once-weekly dosing; older basal and premix products decline as patients switch. The category is useful cash-generating ballast, not the primary growth engine.

R&D is economically part of product margin even if the issuer does not allocate it by brand. CagriSema and zenagamtide can replenish the franchise but require late-stage trials, outcome evidence and launch spending before scale. Failed or deprioritised assets can generate impairments, as Q2 2026 demonstrated. A margin forecast that simply restores the FY2024 peak without paying for pipeline and launches would be internally inconsistent.

The observed history supports this structure. Segment operating margin rose from 40.7% in FY2021 to 47.0% in FY2024 as GLP-1 mix and volume scaled, then fell to 43.7% in FY2025 as capacity, depreciation, restructuring, pricing and R&D pressure increased. [data_package §3 Obesity and Diabetes care, margin row] The base case assumes part of the scale advantage survives but not the peak margin.

4. Competitive dynamics

Eli Lilly is the immediate constraint. In SURMOUNT-5, tirzepatide delivered 20.2% average weight loss at 72 weeks versus 13.7% for Wegovy 2.4mg, and it beat semaglutide across all five key secondary weight-loss thresholds. The open-label trial does not settle every safety, outcomes or persistence question, but it gives prescribers and payors a strong efficacy reason to prefer Zepbound for some patients. [Lilly SURMOUNT-5 release](https://investor.lilly.com/node/52376)

Commercial evidence is equally important. Lilly reported Q2 2026 Mounjaro revenue of USD 9.943bn, up 91%, and Zepbound revenue of USD 4.928bn, up 46%. Lilly said total company volume rose 60% while realised prices fell 13%. This is the closest observable comparable for Novo's price-volume trade: very large volume can overwhelm meaningful price pressure, but only when the product is taking share and supply is available. [Lilly Q2 2026 results](https://investor.lilly.com/news-releases/news-release-details/lilly-reports-second-quarter-2026-financial-results-raises-full)

Lilly also attacks the oral format. Foundayo, orforglipron, is an approved once-daily small-molecule GLP-1 that can be taken without food or water restrictions. Lilly reported up to 13% mean weight reduction in adults at least 65 years old at the highest approved dose and inclusion in the Medicare Bridge. Unlike oral semaglutide, its administration convenience does not require fasting restrictions. [Lilly Foundayo analysis](https://investor.lilly.com/news-releases/news-release-details/foundayo-orforglipron-once-daily-pill-taken-without-food-or) This is a meaningful threat to Wegovy pill adoption and to the diabetes oral franchise.

Other large pharmaceutical companies are investing in incretins, amylin combinations and related mechanisms, but the practical five-year market is likely to remain concentrated among companies with validated late-stage assets and manufacturing scale. Entry barriers include clinical evidence, long outcome trials, peptide chemistry, device and fill-finish capacity, regulatory manufacturing controls, payer contracting and the ability to fund outcome studies. Strong early weight loss is insufficient without tolerability, cardiovascular evidence, scalable production and reimbursement.

Novo retains real strengths. Semaglutide spans diabetes and obesity, oral and injectable formats, and multiple cardiometabolic outcomes indications. The data package records a 58% International Operations GLP-1 volume share in April 2026 and a 30.1% diabetes value share at FY2025. These are point-in-time observations, not a continuous market-share series. [data_package §0a Pharma KPI history, Market share row]

Pricing power is now relative rather than absolute. Novo can defend value where semaglutide's outcomes data, format breadth or payer economics matter, but it cannot assume brand familiarity defeats materially better weight loss or easier administration. The segment increasingly competes on net cost per successfully treated and persistent patient, not wholesale

acquisition cost.

Substitution risk operates in both directions. New oral medicines can expand the treated market beyond injections while cannibalising Novo's own formats. Better multi-agonists can move patients from first-generation GLP-1s. Yet not every patient wants maximum weight loss, tolerates the same drug or has the same formulary. Portfolio breadth matters because obesity and diabetes are heterogeneous chronic conditions.

5. Moat at the segment level

The segment has a durable but narrowing moat. The strongest protection is accumulated clinical and regulatory evidence around semaglutide, reinforced by a century-scale diabetes commercial network and vertically coordinated manufacturing. Outcome labels across cardiovascular, kidney and metabolic disease can lower prescriber uncertainty and help payer negotiations. A broad set of formulations also lets Novo place patients into an oral or injectable route rather than lose everyone who rejects one format.

The manufacturing moat is tangible because it takes years and billions of kroner to build validated capacity. The company invested about USD 2bn in US manufacturing during 2025 and planned another USD 5.6bn through 2028; it also announced about DKK 3.2bn for oral GLP-1 tableting in Athlone. [data_package §6 Consolidated outlook, capacity rows] That scale makes rapid imitation difficult, but it can become a fixed-cost burden if share shifts or price falls faster than volume grows.

The evidence moat is stronger than a patent-only story but not impregnable. Lilly already produced a head-to-head efficacy result and is scaling faster. Foundayo weakens the assumption that Novo owns oral convenience. CagriSema and zenagamtide are therefore moat-renewal assets, not optional decoration. Novo describes CagriSema as a fixed-dose amylin/GLP-1 combination for obesity and diabetes and zenagamtide, formerly amycretin, as a long-acting GLP-1/amylin agonist in oral and injectable development. Neither was US-approved as of the cited May 2026 update. [Novo cardiometabolic pipeline release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916555)

Over five to ten years, the moat depends on three tests. Can Novo grow treated patients faster than net price declines? Can the pipeline deliver differentiated outcomes rather than merely match the market? Can manufacturing investment raise availability without depressing returns on capital? A yes to all three supports the bull. Failure on one still permits a profitable franchise. Failure on two would turn the segment into a mature, price-competed chronic-care supplier.

6. Historical growth rates

The table reproduces issuer-disclosed history from the reviewed package. `3-year CAGR` means the two compounding intervals from FY2023 to FY2025. Calculated rates retain the exact cited endpoints. No dollars are back-solved.

Product / sub-segment	FY2023 rev	FY2024 rev	FY2025 rev	3-year CAGR	Most recent YoY	Data package cite
Obesity and Diabetes care	215.098 [data_package §3, revenue row]	271.764 [data_package §3, revenue row]	289.456 [data_package §3, revenue row]	16.0% [same row]	6.5% [data_package §3, YoY row]	§3 Obesity and Diabetes care rows 1-2
GLP-1 diabetes	123.132 [data_package §4, history row 4]	149.125 [data_package §4, history row 4]	152.202 [data_package §4, history row 4]	11.2% [same row]	2.1% [same row]	§4 Longest clean history row 4
Insulin	48.022 [data_package §4, history row 5]	55.373 [data_package §4, history row 5]	53.137 [data_package §4, history row 5]	5.2% [same row]	(4.0%) [same row]	§4 Longest clean history row 5
Other diabetes	2.312 [data_package §4, product row 13]	2.120 [data_package §4, product row 13]	1.770 [data_package §4, product row 13]	(12.5%) [same row]	(16.5%) [same row]	§4 Product table row 13
Obesity care	41.632 [data_package §4, history row 6]	65.146 [data_package §4, history row 6]	82.347 [data_package §4, history row 6]	40.6% [same row]	26.4% [same row]	§4 Longest clean history row 6
Wegovy injectable	31.343 [data_package §4, history row 7]	58.206 [data_package §4, history row 7]	79.106 [data_package §4, history row 7]	58.9% [same row]	35.9% [same row]	§4 Longest clean history row 7
Saxenda	10.289 [data_package §4, product row 15]	6.940 [data_package §4, product row 15]	3.241 [data_package §4, product row 15]	(43.9%) [same row]	(53.3%) [same row]	§4 Product table row 15

Arithmetic verification: DKK 271.764bn × 1.0651 = DKK 289.456bn for the segment; DKK 149.125bn × 1.0206 = DKK 152.202bn for GLP-1 diabetes; DKK 55.373bn × 0.9596 = DKK 53.137bn for insulin; DKK 65.146bn × 1.2640 = DKK 82.347bn for obesity care; and DKK 58.206bn × 1.3591 = DKK 79.106bn for Wegovy. Every check is within 0.1%, inside the 2% contract. No back-solved row exists, so no estimated-dollar tie-out is required.

The pattern matters more than the headline CAGR. Wegovy expanded extremely quickly, but diabetes GLP-1 growth slowed to 2.1% in FY2025 and insulin declined. Segment growth moved from 37.5% in FY2023 and 26.3% in FY2024 to 6.5% in FY2025. [data_package §3, YoY row] Recent adjusted quarters remain volatile: Q1 2026 adjusted segment sales fell 4% at CER, then Q2 improved 7%. [data_package §5, segment trend]

7. Management guidance and forward anchors

Every obesity-and-diabetes forward comment in data-package §6 is retained below. Excerpts are quoted from the reviewed artifact, not re-fetched transcripts.

Data package row / date / speaker	Verbatim excerpt or disclosed anchor	Interpretation
§6 Obesity row 1 / 2026-08-05 / Mike Doustdar, CEO	“The increased US GLP-1 momentum… has led us to further raise our 2026 guidance”	Momentum improved the floor, but full-year growth remained flat to negative.
§6 Obesity row 2 / 2026-05-06 / Mike Doustdar, CEO	“Price is dynamic and a function of volume uptake.”	Price and volume must be modeled jointly.
§6 Obesity row 3 / 2026-05-06 / Jamey Millar, EVP US Operations	“titration is happening as expected and comparable to what we see with injectable Wegovy”	Early pill scripts include titration; mature persistence is unproven.
§6 Obesity row 4 / 2026-05-06 / Karsten Knudsen, CFO	“expect us to lean in on R&D investment in the coming quarters”	Do not extrapolate a temporarily low R&D ratio into terminal margin.
§6 Obesity row 5 / 2026-05-06 / Karsten Knudsen, CFO	“minus 10% to up to minus 15% price erosion”	Explicit near-term US Ozempic price downside anchor.
§6 Obesity row 6 / 2026-02-04 / Mike Doustdar, CEO	“we feel incredibly confident that we will be able to supply the U.S. market”	US pill supply is less constrained; global capacity is unquantified.
§6 Obesity row 7 / 2026-02-04 / Karsten Knudsen, CFO	“the gross margin on the Wegovy pill is below that of the Wegovy injectable”	Oral mix creates access but dilutes gross margin.
§6 Obesity row 8 / 2026-02-04 / Mike Doustdar, CEO	“price reduction… is our investment for the future and for capturing more patients”	Access works only if volume elasticity is strong.
§6 Obesity row 9 / 2025-11-05 / Mike Doustdar, CEO	“we will concentrate on these areas where we can make the greatest difference”	R&D and BD stay concentrated in cardiometabolic disease.
§6 Obesity row 10 / 2025-11-05 / Ludovic Helfgott, EVP	“the priority of our Wegovy pill launch is the U.S.”	Ex-US pill rollout is upside beyond the initial US cadence.
§6 Obesity row 11 / 2026-06-07 / Martin Holst Lange, CSO section	“Obesity data expected in H1 2027”	UBT251 contributes no 2026 base revenue.
§6 Obesity row 12 / 2026-06-07 / Martin Holst Lange, CSO section	“REDEFINE 3… is expected to read-out in second half of 2027”	CagriSema timing depends on future outcomes evidence.
§6 Consolidated anchor 1	Adjusted 2026 sales growth 0% to (6%) CER	A one-year group range, not a five-year CAGR.
§6 Consolidated anchor 2	Adjusted operating-profit growth 0% to (6%) CER	Pricing and reinvestment constrain profit.
§6 Consolidated anchor 3	Adjusted Q2 gross margin 78.2%; operating margin 42.5%	Underlying margin excludes 340B and impairment effects.
§6 Consolidated anchor 4	FY2025 gross margin 81.0%, down from 84.7%	Depreciation, capacity cost and FX offset GLP-1 mix.
§6 Consolidated anchor 5	2026 PP&E capex about DKK 55bn	Supply expansion remains capital intensive.
§6 Consolidated anchor 6	About DKK 3.2bn Athlone tableting expansion	Oral capacity grows outside the US; dose capacity is undisclosed.
§6 Consolidated anchor 7	Further USD 5.6bn US manufacturing planned toward 2028	Capacity benefits and depreciation extend through the forecast.

[DATA GAP: Q2 FY2026 text earnings-call transcript was unavailable. The reviewed package uses the official release, presentation and workbook; no Q2 call-only dialogue is quoted.] [data_package §10, transcript row]

8. Forward growth assumptions

The model compounds from the DKK 283.479bn normalized TTM base, not FY2025 and not the event-inflated DKK 308.993bn TTM. It uses therapy categories because the package discloses the 340B adjustment at therapy level but not at brand level. `Pipeline / comorbidity launches` starts at zero and is stated as terminal incremental revenue, so a CAGR is not meaningful.

Base case

Product / sub-segment	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Base CAGR TTM→TTM+5y	Justification
GLP-1 diabetes	11.2%	2.1% FY2025; 2% adjusted Q2 CER	Ozempic price erosion (10%) to (15%)	2.0%	Volume grows about 9% annually but price/mix falls about 6.4%; 2027 MFP and tirzepatide cap growth.
Insulin	5.2%	(4.0%)	No product guide; group 0% to (6%) CER	0.0%	Awiqli and emerging-market volume offset legacy price and product decline.

Product / sub-segment	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Base CAGR TTM→TTM+5y	Justification
Other diabetes	(12.5%)	(16.5%)	None	(8.0%)	Mature products keep shrinking, but decline moderates from the latest year.
Obesity care, existing	40.6%; Wegovy 58.9%	26.4%; 16% adjusted Q2 CER	Pill supply confidence; price reduction for access	8.0%	Volume grows about 15% and price/mix falls about 6.1%; Zepbound and Foundayo drive deceleration.
Pipeline / comorbidity launches	n/m	n/m	UBT251 H1 2027; REDEFINE 3 H2 2027	DKK 15.0bn terminal	Risk-adjusted CagriSema / zenagamtide contribution begins late and partly cannibalises semaglutide.

Base deceleration is explicit. GLP-1 diabetes annual growth is (2%), 1%, 3%, 4% and 4.1%. Existing obesity growth is 11%, 10%, 8%, 6% and 5.1%, versus 26.4% in FY2025 and 16% adjusted Q2 CER. The final tenths make the shaped cadence reconcile exactly to the constant-equivalent terminal values. That path is defensible in a category where the leader faces a superior head-to-head injectable and a newly approved oral competitor. It avoids a permanent collapse: Lilly's Q2 2026 60% volume growth despite 13% lower realised price shows that access can sustain revenue. Price-volume splits are analytic: diabetes GLP-1 volume +9% and price/mix (6.4%); obesity volume +15% and price/mix (6.1%); insulin volume +2% and price/mix (2%). Multiplicative effects reconcile to net CAGR.

Bull case

Product / sub-segment	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Bull CAGR TTM→TTM+5y	Justification
GLP-1 diabetes	11.2%	2.1% FY2025	Ozempic price erosion (10%) to (15%)	6.0%	Outcomes evidence, oral uptake and access drive 12% volume, offsetting about 5.4% price/mix decline.
Insulin	5.2%	(4.0%)	None	2.0%	Awiqli refreshes mix and international volume grows without a severe reset.
Other diabetes	(12.5%)	(16.5%)	None	(3.0%)	Residual portfolio stabilises as the sharp legacy decline exhausts itself.
Obesity care, existing	40.6%	26.4%	US pill supply confidence	14.0%	Access expands, ex-US launches scale and higher-dose Wegovy defends share; volume +21% beats price/mix (5.8%).
Pipeline / comorbidity launches	n/m	n/m	2027 data milestones	DKK 30.0bn terminal	Successful CagriSema and zenagamtide launches add differentiated efficacy and formats by 2031.

Bull annual growth is 3%, 5%, 7%, 7% and 8% for diabetes GLP-1 and 16%, 15%, 14%, 13% and 12% for existing obesity. This requires share retention, strong Medicare and cash-channel persistence, international launches and no supply interruption. It assumes pipeline products expand the market enough that cannibalisation does not erase their contribution.

Bear case

Product / sub-segment	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Bear CAGR TTM→TTM+5y	Justification
GLP-1 diabetes	11.2%	2.1% FY2025	Ozempic price erosion (10%) to (15%)	(4.0%)	Tirzepatide share gains and price referencing overwhelm 4% volume; price/mix falls about 7.7%.
Insulin	5.2%	(4.0%)	None	(3.0%)	Tender and regulatory pricing plus mature-brand erosion exceed Awiqli.
Other diabetes	(12.5%)	(16.5%)	None	(15.0%)	Portfolio continues near its recent decline rate.
Obesity care, existing	40.6%	26.4%	Price reduction for access	1.0%	8% volume growth is consumed by about 6.5% price/mix pressure and Lilly share gains.
Pipeline / comorbidity launches	n/m	n/m	2027 data milestones	DKK 3.0bn terminal	Delays, weak differentiation or restricted reimbursement leave modest sales.

Bear annual growth is (8%), (6%), (3%), (2%) and (1%) for diabetes GLP-1. Existing obesity slows through 4%, 2%, 0%, 0% and (1%). This is harsher than base but not a cliff: prevalence, outcomes evidence and format breadth preserve volume. The bear is driven by price and share, not disappearing demand.

The 2027 step is modeled explicitly rather than by applying the 71% list-price discount to global revenue. CMS's USD 274 negotiated price covers Ozempic, Rybelsus and Wegovy for the affected Medicare channel; it is not Novo's prior global net price and it does not apply to all patients. The table below derives the first-year global price/mix step from each case's first-year revenue path and volume assumption. These 2027 values are already embedded in the five-year CAGR and are not deducted a second time.

Case	GLP-1 diabetes 2027 volume	GLP-1 diabetes 2027 price/mix	GLP-1 diabetes 2027 net growth	Existing obesity 2027 volume	Existing obesity 2027 price/mix	Existing obesity 2027 net growth
Bear	4.0%	(11.5%)	(8.0%)	8.0%	(3.7%)	4.0%
Base	9.0%	(10.1%)	(2.0%)	15.0%	(3.5%)	11.0%
Bull	12.0%	(8.0%)	3.0%	21.0%	(4.1%)	16.0%

The diabetes base and bear price steps sit inside or near management's (10%) to (15%) US Ozempic erosion anchor after dilution across non-US markets and products. The smaller obesity price/mix steps reflect the channel-limited nature of the Medicare price, but still require strong volume elasticity. Foundayo's USD 149 self-pay launch price and no-food-or-water dosing, alongside Zepbound's superior 20.2% versus 13.7% head-to-head weight loss, are the mechanisms that prevent a rapid price recovery in base and bear. [data_package §6 Obesity rows 2, 5 and 8; CMS 2027 negotiated-price fact sheet; Lilly Foundayo approval and SURMOUNT-5 releases cited in §§3-4]

Pill and injectable mix within the therapy forecasts

Reported TTM brand mix is not used to allocate 340B, but it informs formats. Diabetes GLP-1 was about 84% Ozempic injectable, 13% Rybelsus / Ozempic pill and 3% Victoza on reported TTM dollars. Obesity care was about 91% Wegovy injectable, 6% Wegovy pill and 3% other products. [data_package §4 Longest clean history rows 1-8]

Case	Diabetes GLP-1 terminal mix	Implied diabetes DKK bn	Obesity existing terminal mix	Implied obesity DKK bn	Economic meaning
Bear	78% injectable; 15% Novo oral; 7% legacy	91.441 / 17.585 / 8.206	62% injectable; 30% pill; 8% legacy	57.092 / 27.625 / 7.367	Foundayo wins convenience patients; Novo's lower-margin pill cannibalises injections.
Base	76% injectable; 20% Novo oral; 4% legacy	120.643 / 31.748 / 6.350	70% injectable; 25% pill; 5% legacy	90.115 / 32.184 / 6.437	Pill expands access but does not displace evidence-rich injections.
Bull	73% injectable; 25% Novo oral; 2% legacy	140.456 / 48.102 / 3.848	75% injectable; 20% pill; 5% legacy	126.521 / 33.739 / 8.435	Higher-dose and next-generation injections preserve mix while oral recruits patients.

The implied DKK columns follow the percentage order shown in the adjacent mix column and sum to each therapy terminal revenue within DKK 0.001bn. They make the oral/injectable assumption auditable without allocating the 340B reversal to a brand. Bear uses a higher Novo-pill share of a much smaller retained franchise because oral cannibalisation is strongest even as Foundayo captures part of the category; bull retains more injectable mix through Wegovy 7.2mg and next-generation efficacy.

[DATA GAP: Brand-level net price, unit volume, gross-to-net rebate and 340B allocation are not separately disclosed. Price-volume splits and terminal format shares are explicit scenario assumptions.] [data_package §10]

Pipeline is modeled as net incremental segment revenue, not as a second copy of sales already inside the existing-therapy CAGRs. The current-product rows cover marketed Ozempic / Rybelsus / Victoza, insulin and obesity products; the pipeline row covers future CagriSema, zenagamtide and comorbidity indications. The explicit gross-to-net-new bridge below deducts assumed within-Novo cannibalisation before the DKK 3bn / 15bn / 30bn pipeline row is added.

Case	Gross future-launch revenue	Less displacement of existing Novo therapies	Net pipeline revenue added	Pipeline share of terminal segment revenue
Bear	6.000	(3.000)	3.000	1.2%
Base	25.000	(10.000)	15.000	4.2%
Bull	42.000	(12.000)	30.000	6.7%

Gross launch revenue and displacement are analyst assumptions because the issuer discloses milestones, not five-year product targets. Base requires CagriSema and/or zenagamtide to reach commercial scale after the 2027 evidence and approval gates; bear assumes delays or weak differentiation; bull requires multiple timely launches and reimbursement. The revenue rollup uses only the net column, and Section 9 applies pipeline margin only to that same net revenue, so neither revenue nor profit is double counted.

9. Forward Segment operating profit margin assumptions

The exact metric is **Segment operating profit**. Reported TTM margin is 45.8%; the source-bound recurring range is 42.4%-43.2%, with 41.0% retained as the conservative pre-impairment-normalization anchor. Product margins below are analyst allocations used only to build a revenue-weighted segment result because issuer product margins and segment expense allocations are not disclosed. They do not relabel gross profit or invent a corporate allocation.

Case and line	TTM+5y revenue	Segment operating profit margin	TTM+5y Segment operating profit	Mechanism
Bear - GLP-1 diabetes	117.232	34.0%	39.859	Price and share pressure overwhelm scale.
Bear - Insulin	42.920	25.0%	10.730	Tender pricing and under-absorbed legacy capacity.
Bear - Other diabetes	0.935	0.0%	0.000	Residual sales only cover direct and commercial costs.
Bear - Obesity existing	92.084	28.0%	25.784	Lower price, oral dilution and launch spending.
Bear - Pipeline launches	3.000	(50.0%)	(1.500)	Late launches do not absorb R&D and commercial cost.
Base - GLP-1 diabetes	158.741	45.0%	71.433	Scale offsets price; outcomes evidence sustains mix.
Base - Insulin	49.980	35.0%	17.493	Stable network and Awiqli refresh mix.
Base - Other diabetes	1.389	20.0%	0.278	Runoff portfolio retains some contribution.
Base - Obesity existing	128.735	42.0%	54.069	Volume leverage offsets lower price and pill margin.
Base - Pipeline launches	15.000	20.0%	3.000	Early products remain launch and R&D intensive.
Bull - GLP-1 diabetes	192.406	50.0%	96.203	Access, mix and high utilisation support leverage.
Bull - Insulin	55.182	40.0%	22.073	Awiqli and international mix support economics.
Bull - Other diabetes	1.809	30.0%	0.543	Stable niche contribution.
Bull - Obesity existing	168.695	50.0%	84.347	High utilisation and injectable strength offset price.
Bull - Pipeline launches	30.000	35.0%	10.500	Successful launches scale before the horizon.

Against the 42.4% source-bound recurring lower anchor, bear falls 13.2 points, base falls 1.1 points and bull rises 5.3 points. The analytical attribution is deliberately explicit: bear assigns about (8.0) points to net price/share and lower injectable mix, (3.0) points to unused new capacity and (2.2) points to continuing R&D/failed-launch cost; base assigns about (4.0) points to price, oral mix, R&D and depreciation, offset by about 2.9 points of volume and capacity leverage; bull assigns about 7.0 points to high utilisation, access and injectable/pipeline mix, offset by about (1.7) points of ongoing R&D and launch cost. These are scenario decompositions, not issuer-disclosed expense allocations. Base at 41.3% is also 2.4 points below FY2025's 43.7%; bull at 47.7% is 4.5 points above the 43.2% recurring upper sensitivity and therefore requires all of its operating levers rather than generic “scale.”

The base does not treat Q2 impairments as recurring cash costs, but it keeps high ongoing research expense. Bear assumes failed programmes still consume cost and may create impairments. Bull earns higher margin only after successful assets scale. This preserves pharmaceutical R&D asymmetry.

10. Segment rollup

The rollup compounds each normalized TTM therapy line for exactly five years and adds risk-adjusted terminal pipeline revenue. Profit sums Section 9 line contributions. No corporate, financial-income, financial-expense or tax item is included.

Product / sub-segment	Bear revenue	Bear margin	Bear profit	Base revenue	Base margin	Base profit	Bull revenue	Bull margin	Bull profit
GLP-1 diabetes	117.232	34.0%	39.859	158.741	45.0%	71.433	192.406	50.0%	96.203
Insulin	42.920	25.0%	10.730	49.980	35.0%	17.493	55.182	40.0%	22.073
Other diabetes	0.935	0.0%	0.000	1.389	20.0%	0.278	1.809	30.0%	0.543
Obesity care, existing	92.084	28.0%	25.784	128.735	42.0%	54.069	168.695	50.0%	84.347
Pipeline / comorbidity launches	3.000	(50.0%)	(1.500)	15.000	20.0%	3.000	30.000	35.0%	10.500
Segment total	256.170	29.2%	74.872	353.845	41.3%	146.273	448.093	47.7%	213.666

Arithmetic tie-outs: Bear displayed components sum to DKK 256.171bn versus DKK 256.170bn at full precision, a DKK 0.001bn rounding difference. Bear displayed profit components sum to DKK 74.873bn versus DKK 74.872bn at full precision, also DKK 0.001bn. Base revenue is DKK 353.845bn; base profit is DKK 146.273bn and margin 41.3%. Bull displayed components sum to DKK 448.092bn versus DKK 448.093bn at full precision; bull profit is DKK 213.666bn and margin 47.7%. Every difference is below 0.001%, inside the 1% contract.

From DKK 283.479bn normalized TTM revenue, segment CAGR is (2.0%) bear, 4.5% base and 9.6% bull. Base adds DKK 70.366bn revenue over five years while generating only DKK 4.649bn more Segment operating profit than the event-heavy reported TTM. Against recurring upper-bound TTM profit of DKK 122.438bn, base profit grows about 3.6% annually. This asymmetry is intentional: price, pill mix and R&D absorb sales growth.

Normalized year-by-year base cadence

DKK bn	TTM 2026-06-30	2027E	2028E	2029E	2030E	2031-06-30E
GLP-1 diabetes	143.777	140.901	142.310	146.579	152.442	158.741
Insulin	49.980	50.480	50.985	50.985	50.475	49.980
Other diabetes	2.107	1.896	1.707	1.570	1.445	1.389
Obesity care, existing	87.615	97.253	106.978	115.536	122.468	128.735
Pipeline / comorbidity launches	0.000	0.000	1.000	4.000	9.000	15.000
Segment revenue	283.479	290.530	302.980	318.670	335.830	353.845

The cadence captures the 2027 Medicare and competitive step-down better than a smooth CAGR. Its final row now reproduces the Section 10 base terminal rollup exactly; intervening displayed components sum to the segment rows within DKK 0.001bn rounding.

11. Key risks and wildcards

- **Bear - efficacy-driven share loss.** Tirzepatide's head-to-head result gives Lilly a strong claim. If next-generation Novo products do not close the gap, price concessions may not arrest share loss.
- **Bear - 2027 price contagion.** The USD 274 MFP is not a direct 71% revenue cut, but it can become a reference for commercial plans and governments.
- **Bear - oral convenience disadvantage.** Foundayo's no-food-or-water dosing can win oral patients. Higher Novo pill share may also dilute gross margin.
- **Bear / base - 340B volatility.** The DKK 26.760bn H1 reversal shows gross-to-net estimates can dominate quarterly reporting and obscure demand.
- **Base - capacity execution.** Large API, fill-finish and tableting projects remove shortages, but delays constrain volume while excess capacity raises depreciation. Physical doses are undisclosed.

- **Base / bull - access elasticity.** Lower patient cost can expand treatment. The wildcard is whether incremental patients persist long enough to offset net-price decline.
- **Bull - CagriSema differentiation.** Successful REDEFINE outcomes and competitive efficacy could extend the franchise. The model waits for 2027 evidence.
- **Bull - zenagamtide optionality.** Oral and injectable GLP-1/amylin formats can replenish both therapy markets. DKK 30bn terminal pipeline revenue requires timely approvals and reimbursement.
- **Bear - impairment and pipeline productivity.** Q2's DKK 6.328bn impairments show booked assets can fail. Repeated failures hurt Segment operating profit and replacement-growth credibility.
- **All cases - safety, regulation and litigation.** Adverse events, label limits, compounded-drug policy or liability claims can alter demand and access faster than modeled.

Summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	DKK 256.170bn	Segment operating profit	29.2%	DKK 74.872bn	30%
Base	DKK 353.845bn	Segment operating profit	41.3%	DKK 146.273bn	50%
Bull	DKK 448.093bn	Segment operating profit	47.7%	DKK 213.666bn	20%

The probability-weighted terminal outcome is DKK 343.392bn revenue and DKK 138.332bn Segment operating profit, equivalent to a 40.3% weighted margin. This is a scenario average, not a separate forecast. The segment remains exceptionally profitable, but the moat no longer justifies assuming that obesity demand automatically becomes Novo revenue. The key underwriting variable is price-volume elasticity under credible Lilly competition, followed by pipeline differentiation and capacity utilisation.

Weights are deliberately non-uniform. Base receives 50% because adjusted Q2 segment sales improved to 7% CER and supply/access momentum strengthened, while management's full-year sales range remained 0% to (6%) and still signaled pressure. Bear receives 30% because the 2027 pricing reset, Lilly's accelerating tirzepatide franchise and Foundayo convenience are observable rather than hypothetical. Bull receives 20% because it requires simultaneous high capacity utilisation, sustained injectable mix, strong price elasticity and multiple differentiated pipeline launches. [data_package §§5-6]

Data-gap register

- [DATA GAP: Brand-level net realised price, gross-to-net rebate and unit-volume history are not disclosed; scenario splits are analytical assumptions.] [data_package §10]
- [DATA GAP: Physical production capacity in doses by site, product and year is not disclosed; no dose-capacity estimate is invented.] [data_package §10]
- [DATA GAP: Reportable-segment cost of sales, R&D, sales and administration allocations are not disclosed; product margins are analytical.] [data_package §10]
- [DATA GAP: Q2 FY2026 text transcript was unavailable; official release, presentation and workbook provide prepared evidence only.] [data_package §10]

Research only. No ranking, sizing, portfolio mutation, broker action, order or trade is authorised. `trade_execution_authorized=false`.

Appendix B2 - Rare Disease

Rare disease - Segment Deep Dive

Company: Novo Nordisk A/S **Security:** Copenhagen B share, queue ticker `NVO.CO` **Reporting currency:** DKK; financial tables use DKK billion unless stated otherwise **TTM anchor:** 30 June 2026 **Forecast horizon:** 30 June 2031, exactly five calendar years from the TTM anchor **Exact profit metric:** `Segment operating profit` **Scenario weights:** Bear 30%; Base 50%; Bull 20%

The weights are deliberately non-uniform. Base receives 50% because segment revenue has recovered but management has supplied no numeric five-year sales or margin target; Bear receives 30% because the TTM margin is only 2.31%, NovoSeven is declining and launch spending can persist; Bull receives 20% because it requires several independent launch, access and margin-leverage wins.

0. Segment boundary and taxonomy note

Novo Nordisk reports Rare disease as one of two IFRS business segments. It contains rare blood disorders, rare endocrine disorders and Other Rare disease. The comparable modeling boundary begins in FY2022: the prior `Biopharm` segment was renamed and reframed as `Rare disease` in FY2022, while FY2021 retains the old label. Dollar comparisons in this appendix therefore use FY2022 onward for segment-level trend analysis and FY2023 onward for the clean product table. The issuer did not restate the segment again in the last three years. Geography changes in 2025 do not alter this IFRS segment boundary [data_package §1, lines 61-73].

The sealed statutory bridge is additive. Rare disease and Obesity and Diabetes care together equal consolidated `Segment operating profit`; there are no corporate or unallocated operating adjustments in the latest-FY or TTM bridge. Financial income, financial expense and tax are separate below-line items and are not allocated here. This appendix therefore forecasts Rare disease revenue and `Segment operating profit` directly, preserving both the metric label and the sign convention [data_package §3a, lines 115-165; statutory_bridge.json, periods FY2025 and TTM].

1. What this segment actually is

Rare disease is a specialist-pharmaceutical franchise rather than a single product. The commercial customer is usually a specialist prescriber, treatment centre, hospital or payer serving a small, medically identifiable population. In haemophilia, revenue comes from replacement factors and non-factor prophylaxis used chronically to prevent or treat bleeding. NovoSeven, a bypassing agent, is the largest disclosed rare-blood product and remains important for acute or episodic use. NovoEight and Esperoct serve haemophilia A, while Refixia serves haemophilia B. Alhemo is a newer subcutaneous prophylactic for haemophilia A or B. NovoThirteen addresses congenital factor XIII deficiency. Individual sales for those smaller brands are not disclosed; the annual workbooks publish haemophilia A, haemophilia B and NovoSeven groupings [data_package §4, lines 167-217].

Rare endocrine is principally growth-hormone replacement. Norditropin is a daily somatropin product; Sogroya is a once-weekly somapacitan formulation. The economic proposition is not a cure but reliable lifelong or multi-year replacement with less administration burden, established monitoring and a delivery device that fits specialist practice. The [FDA label](https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/761156s014lbl.pdf) confirms weekly administration across pediatric and adult growth-hormone deficiency and, as of 2026, additional pediatric growth-failure indications. Weekly convenience is valuable, but it is not unique: Pfizer’s Ngenla and Ascendis Pharma’s Skytrofa also compete with weekly regimens. Consequently, Sogroya’s commercial durability depends on clinical confidence, label breadth, access, device experience and switching execution rather than dosing frequency alone.

Other Rare disease is mainly Vagifem and Activelle and related hormone-replacement products. This is a small, mature tail rather than the engine of the rare-disease thesis. Its role in the model is stabilising cash contribution, not structural growth [data_package §4, lines 191-192].

The forward option set is concentrated in rare blood. Denecimig, formerly Mim8, is a Factor VIIIa-mimetic bispecific antibody submitted in the US and EU for haemophilia A with and without inhibitors. Its weekly, fortnightly or monthly subcutaneous dosing aims to reduce treatment burden. Etavopivat is an oral pyruvate-kinase activator in sickle-cell disease; the HIBISCUS trial met both co-primary endpoints and Novo planned the first filing in H2 2026. Zaltenibart, a licensed MASP-3 inhibitor, is intended for complement-mediated rare blood and kidney diseases, including a planned global phase 3 programme in

paroxysmal nocturnal haemoglobinuria. These programmes expand the addressable perimeter, but none is treated as current revenue merely because it was filed, licensed or clinically successful [data_package §6, lines 282-291; §9, lines 343-353].

Pricing is negotiated through national health systems, insurers and specialist channels, often with patient-support services and centre-based prescribing. Rare-disease list prices can be high because populations are small, but realised economics depend on country access, rebates, competition and the clinical value of fewer bleeds or fewer injections. Go-to-market is therefore evidence-heavy and concentrated: regulatory approval, guideline placement, specialist confidence and reimbursement can matter more than broad consumer marketing. The same concentration makes a launch scalable once accepted, but also creates binary access and execution risk.

2. Current economics

FY2025 Rare disease revenue was DKK 19.608bn, 6.3% of Novo Nordisk sales, and grew 5.2% in reported DKK. `Segment operating profit` was DKK 1.212bn, a 6.2% margin. That compares with DKK 20.542bn of revenue and a 36.1% margin in FY2022, DKK 17.163bn and 17.2% in FY2023, and DKK 18.639bn and 3.3% in FY2024 [official FY2022-FY2025 annual workbooks, `IS & OCI`; data_package §1, lines 65-71 and §3, lines 104-113]. The franchise has recovered revenue from its FY2023 trough, but earnings have not recovered with it.

The TTM ended 30 June 2026 contains DKK 20.438bn of revenue and DKK 0.473bn of `Segment operating profit`, a 2.31% margin [official FY2025 and Q2/H1 2026 workbooks; sealed TTM reconciliation; data_package §0a, line 53 and §3a, lines 136-151]. This is the statutory anchor, not a steady-state margin estimate. Q3 FY2025 had a negative 11.4% segment margin, Q4 recovered to 12.9%, Q1 FY2026 was 29.6% reported because it included a DKK 1.246bn allocation of the 340B provision reversal, and Q2 fell to negative 26.4% amid company pipeline impairments and reinvestment [official Q3 and Q4 FY2025 and Q1 and Q2 FY2026 workbooks; data_package §5, lines 223-240]. The package does not disclose how much of the Q2 DKK 6.328bn company-wide pipeline impairment sat in Rare disease, so this appendix does not manufacture a product-level normalisation.

The TTM revenue composition is more informative than the reported TTM margin. Rare blood disorders contributed DKK 11.467bn, or 56.1% of segment revenue, and rare endocrine DKK 7.158bn, or 35.0%. The residual DKK 1.813bn, or 8.9%, is Other Rare disease, calculated as DKK 20.438bn less DKK 11.467bn less DKK 7.158bn [official FY2025 and Q2/H1 2026 workbooks, `Sales - YTD`; data_package §0a line 53 and §4, lines 194-209].

The data package does not disclose TTM sales for haemophilia A, haemophilia B and NovoSeven separately. For forward-model construction only, the DKK 11.467bn TTM rare-blood total is allocated by each line's FY2025 share of rare-blood sales: DKK 2.315bn to haemophilia A, DKK 1.354bn to haemophilia B, DKK 7.027bn to NovoSeven, and DKK 0.770bn to other rare blood and pipeline launch contribution. These are explicitly analyst allocations, not issuer historical disclosures. The unrounded allocations sum exactly to the sealed DKK 11.467bn TTM group total; the displayed three-decimal figures sum to DKK 11.466bn because of rounding.

[DATA GAP: Novo Nordisk does not disclose separate TTM sales for NovoEight, Esperoct, Refixia, NovoThirteen, Alhemo, Norditropin or Sogroya. The model retains disclosed group totals and uses a transparent FY2025-mix allocation only to create mutually exclusive TTM forecast lines.]

Capital intensity is mixed. Existing recombinant proteins and devices require validated biologic manufacturing, quality systems, controlled distribution and pharmacovigilance. That is more process-intensive than a small-molecule tablet, but rare-disease volumes are much smaller than GLP-1 volumes. The larger economic burden at present is launch and pipeline investment: clinical trials, regulatory submissions, market access and a specialist commercial infrastructure are spread over only DKK 20.4bn of TTM sales. Consolidated PP&E capex reached DKK 60.140bn in FY2025 and DKK 56.043bn TTM, but Novo does not allocate capex by segment, so no rare-disease asset turn is invented [data_package §2, lines 75-91; §7, lines 307-321].

3. Unit economics

Revenue becomes `Segment operating profit` through four economic layers. First, each approved therapy produces net sales after wholesaler, payer and government deductions. Second, biologic manufacturing and delivery-device costs determine gross contribution. Third, specialist selling, market access, medical affairs and post-marketing commitments support adoption. Fourth, discovery, clinical development, acquired-asset amortisation or impairment and regulatory expenses absorb contribution before the reported segment profit line.

The installed portfolio should have attractive gross contribution because patients have high clinical need, providers value reliability and populations are small enough that manufacturing volume is not the binding cost. However, high gross contribution does not guarantee segment profit. The margin history shows this clearly: 47.4% on the old Biopharm label in FY2021, 36.1% in FY2022, 17.2% in FY2023, 3.3% in FY2024, 6.2% in FY2025 and 2.3% in the current TTM [official FY2021-FY2025 annual workbooks, `IS & OCI`; data_package §3, lines 104-113 and §3a, lines 136-151]. A fixed specialist cost base plus unusually heavy R&D and launch spending can consume most contribution when revenue is only 6% of group sales.

The most important positive margin mechanism is mix. Mature NovoSeven can produce meaningful cash contribution even if revenue contracts, while Sogroya and Alhemo can add revenue without recreating the entire infrastructure. If denecimig, etavopivat or zaltenibart succeeds, the commercial platform can carry more revenue across broadly related treatment centres. Scale leverage should then appear in `Segment operating profit` because market-access and medical teams grow more slowly than sales. The most important negative mechanism is the opposite: multiple launches and phase 3 programmes could require higher medical and commercial spending before revenue appears. Acquired milestones or asset impairments can also create lumpy reported profit.

Pricing and mix matter by franchise. In factor replacement and NovoSeven, competition from non-factor prophylaxis, extended-half-life factor and gene therapy can reduce volumes or force discounts. A shift from rescue treatment toward prophylaxis may shrink NovoSeven utilisation even if the overall haemophilia market grows. In endocrine, conversion from daily Norditropin to weekly Sogroya can support mix, adherence and price, but competing weekly products constrain the premium. In Other Rare disease, generic and mature-product pressure makes price a more likely drag than a growth engine.

Cash conversion should be better than reported segment profit when a non-cash impairment depresses earnings, but the package does not provide segment cash flow or segment working capital. Conversely, cash conversion can trail accounting profit during launch inventory build, milestone payments and clinical investment. This appendix therefore forecasts the exact disclosed profit metric only; it does not attach an unsupported segment FCF conversion ratio.

[DATA GAP: reportable-segment cost of sales, R&D, selling/distribution, administration, capex, working capital and product-level margins are not disclosed. Product margins in section 9 are explicit analyst assumptions used only to revenue-weight the disclosed `Segment operating profit` metric.]

4. Competitive dynamics

Haemophilia and rare blood

Novo’s legacy strength is treatment-centre familiarity, a broad haemophilia portfolio, long manufacturing experience and established devices. The weakness is that the largest disclosed rare-blood product, NovoSeven, has lost active-ingredient patent protection across the US, China, Japan and Europe. Novo’s [2025 patent table](https://annualreport.novonordisk.com/2025/strategic-aspirations/commercial-execution.html) states that NovoSeven’s active-ingredient patents are expired in all four regions. Process, formulation, use patents and regulatory protections can still matter, but the core molecule no longer provides a clean statutory moat.

Competitive intensity is high and increasingly centred on convenience. Roche’s Hemlibra is the clearest benchmark in haemophilia A: Roche reported CHF 4.8bn of 2025 sales, up 11%, in its [2025 annual report](https://assets.roche.com/f/250698/x/840001eb3d/rocheannualreport2025.pdf). That scale shows both the size of the subcutaneous prophylaxis opportunity and the incumbent denecimig must displace. Sanofi’s ALTUVIIIO is gaining traction in factor VIII replacement, while Qfitlia was approved in the US for haemophilia A or B with or without inhibitors. Sanofi describes Qfitlia as an antithrombin-lowering therapy dosed as few as six times a year, supported by a companion antithrombin assay, in its [March 2025 approval release](https://www.sanofi.com/en/media-room/press-releases/2025/2025-03-28-20-07-38-3051637). CSL’s Hemgenix offers a one-time gene-therapy option in haemophilia B, although cost, eligibility, durability and centre capacity limit broad substitution.

The competitive conclusion is not that factor products vanish. Patients differ by inhibitor status, age, bleed pattern, comorbidity, access and willingness to switch. Acute breakthrough bleeds and surgery preserve a role for rescue therapies. Yet the direction of travel is toward fewer administrations and more consistent prophylaxis. Denecimig’s monthly option could be competitive, but it must demonstrate efficacy, safety, convenience, payer value and real-world persistence against products that already have scale. Alhemo broadens Novo’s relevance across A and B, but Sanofi’s Qfitlia attacks a similar convenience proposition.

Etavopivat faces a different market. Sickle-cell disease has chronic oral therapies, transfusion-based care and potentially curative gene-editing or transplant options for a subset of patients. Agios reported that mitapivat was under FDA Priority Review for sickle-cell disease with a 1 November 2026 goal date and posted strong phase 3 evidence, in its [Q2 2026 update](https://investor.agios.com/news-releases/news-release-details/agios-reports-second-quarter-2026-financial-results-and-provides). That makes etavopivat's differentiation and filing timing economically relevant. A 27% reduction in vaso-occlusive crises is clinically meaningful, but payers will compare it with other disease-modifying oral agents and curative options rather than with placebo alone.

Zaltenibart enters an even more contested complement landscape. AstraZeneca's Soliris/Ultomiris franchise and Novartis's oral Fabhalta already frame PNH treatment. Novartis reported USD 505m of 2025 Fabhalta sales across PNH and renal indications, up 287% in constant currency, in its [2025 product-sales disclosure](https://www.novartis.com/investors/financial-data/product-sales). Zaltenibart's MASP-3 mechanism may offer differentiation, but its phase 3 programme, safety profile, dosing, endpoint performance and sequencing versus C5 or factor-B/D inhibition are not yet commercially proven.

Rare endocrine

Daily growth hormone is a mature category with biosimilar and branded competition. Weekly dosing reduces administration burden, but weekly alternatives weaken exclusivity. The FDA describes both Sogroya and [Pfizer's Ngenla](https://www.fda.gov/drugs/drug-trials-snapshots/drug-trials-snapshots-ngenla) as once-weekly subcutaneous therapies for relevant growth-hormone-deficiency populations. Ascendis Pharma reported approximately EUR 206m of 2025 Skytrofa revenue and EUR 55m in Q2 2026, in its [2026 business update](https://investors.ascendispharma.com/news-releases/news-release-details/ascendis-pharma-reports-second-quarter-2026-financial-results). That validates category demand but also demonstrates an established competitor.

Novo's advantage is its endocrinology relationships, FlexPro device ecosystem, Norditropin installed base and ability to switch patients within its portfolio. However, the data package contains no clean multi-year market-share series. Base-case growth therefore decelerates from recent rollout rates rather than assuming category dominance.

[DATA GAP: no consistent issuer or independent global market-share series was available for Novo's haemophilia, rare endocrine or overall Rare disease portfolio. Competitor sales are used as scale and momentum context, not as a fabricated share calculation.]

5. Moat at the segment level

The segment has a real but uneven moat. The strongest elements are disease expertise, trusted specialist relationships, biologic manufacturing know-how, a portfolio spanning replacement factors, bypassing therapy, prophylaxis and endocrine products, and the ability to fund long clinical programmes. Regulatory dossiers, pharmacovigilance histories and reliable supply are meaningful barriers because switching a stable rare-disease patient is not costless. The platform also creates economies of scope: a new rare-blood product can use existing medical, market-access and treatment-centre capabilities.

The moat is weaker at the product level. NovoSeven and Norditropin have expired active-ingredient patents in major regions. Their sales persist because clinical familiarity, formulations, manufacturing, tender access and real-world confidence outlast the core patent, but that is a behavioural and process moat, not an impenetrable legal one. Haemophilia technology is changing rapidly enough that incumbency can become a disadvantage if treatment burden is materially higher. Roche, Sanofi, CSL, Pfizer, Ascendis, Novartis and AstraZeneca have comparable scientific and commercial capabilities.

Denecimig could strengthen the moat if its efficacy and monthly dosing earn durable treatment-centre preference. Sogroya can strengthen the endocrine franchise if label expansion and switching lock in an attractive weekly platform. Etavopivat and zaltenibart could diversify revenue beyond haemophilia and growth hormone. But pipeline breadth is not yet a moat: it becomes one only after differentiated approval, reimbursement, supply and repeatable commercial uptake.

Over five to ten years, the most defensible protection is therefore an integrated rare-disease system rather than a single patent. Novo can combine discovery, trial execution, biologic production, devices, global reimbursement and specialist reach. The durability test is whether that system produces successful launches faster than legacy products decline. The FY2022-to-TTM margin collapse says the system has not yet proved that economically. On current evidence the moat is **moderate, not wide**: enough to support recovery, insufficient to justify assuming a return to the 47% Biopharm margin without multiple launch wins.

6. Historical growth rates

The table uses the last three clean annual product observations, FY2023-FY2025. “3-year CAGR” follows the requested three-observation convention and is the annualized rate across the two elapsed year intervals. Every revenue cell cites the exact data-package row. The model later uses mutually exclusive product lines, with “Other rare blood” calculated as the disclosed rare-blood total less the disclosed haemophilia A, haemophilia B and NovoSeven lines.

Product / sub-segment	FY2023 rev	FY2024 rev	FY2025 rev	3-year CAGR	Most recent YoY	Data package cite
Rare disease segment	17.163 [§3 L108]	18.639 [§3 L108]	19.608 [§3 L108]	6.89% [calc.; §3 L108]	5.20% [§3 L109]	FY2023-FY2025 official workbooks, `IS & OCI`; data_package §3
Haemophilia A products	2.422 [§4 L188]	2.454 [§4 L188]	2.414 [§4 L188]	(0.17%) [calc.; §4 L188]	(1.63%) [calc.; §4 L188]	FY2023-FY2025 official workbooks, `Sales - YTD`; data_package §4 row “Haemophilia A products”
Haemophilia B products	1.061 [§4 L189]	1.306 [§4 L189]	1.412 [§4 L189]	15.36% [calc.; §4 L189]	8.12% [calc.; §4 L189]	FY2023-FY2025 official workbooks, `Sales - YTD`; data_package §4 row “Haemophilia B products”
NovoSeven	7.958 [§4 L190]	7.983 [§4 L190]	7.326 [§4 L190]	(4.05%) [calc.; §4 L190]	(8.23%) [calc.; §4 L190]	FY2023-FY2025 official workbooks, `Sales - YTD`; data_package §4 row “NovoSeven”
Other rare blood, arithmetic residual	0.335 [§4 L188-190; L206]	0.395 [§4 L188-190; L206]	0.803 [§4 L188-190; L206]	54.82% [calc.; cited rows]	103.29% [calc.; cited rows]	FY2023-FY2025 official workbooks, `Sales - YTD`; rare-blood total less three disclosed rows
Rare endocrine disorders	3.836 [§4 L191]	4.993 [§4 L191]	5.959 [§4 L191]	24.64% [calc.; §4 L191]	19.35% [calc.; §4 L191]	FY2023-FY2025 official workbooks, `Sales - YTD`; data_package §4 row “Rare endocrine disorders”
Other Rare disease	1.551 [§4 L192]	1.508 [§4 L192]	1.694 [§4 L192]	4.51% [calc.; §4 L192]	12.33% [calc.; §4 L192]	FY2023-FY2025 official workbooks, `Sales - YTD`; data_package §4 row “Other Rare disease”

Arithmetic checks pass within 2% for every row. Examples: DKK 18.639bn × 1.0520 = DKK 19.608bn for the segment; DKK 2.454bn × 0.9837 = DKK 2.414bn for haemophilia A; DKK 1.306bn × 1.0812 = DKK 1.412bn for haemophilia B; DKK 7.983bn × 0.9177 = DKK 7.326bn for NovoSeven; DKK 4.993bn × 1.1935 = DKK 5.959bn for rare endocrine; and DKK 1.508bn × 1.1233 = DKK 1.694bn for Other Rare disease.

Residual tie-outs are exact to rounding. FY2023 DKK 11.776bn rare blood less DKK 2.422bn haemophilia A, DKK 1.061bn haemophilia B and DKK 7.958bn NovoSeven equals DKK 0.335bn. FY2024 DKK 12.138bn less DKK 2.454bn, DKK 1.306bn and DKK 7.983bn equals DKK 0.395bn. FY2025 DKK 11.955bn less DKK 2.414bn, DKK 1.412bn and DKK 7.326bn equals DKK 0.803bn. The residual’s 55% annualized growth is mathematically correct but economically misleading because it begins from a very small base and includes multiple undisclosed products.

The historical signal is bifurcated. NovoSeven and haemophilia A contracted, while haemophilia B grew and rare endocrine expanded rapidly with Sogroya and improved Norditropin supply. Segment growth is therefore already dependent on replacing mature-product erosion. That is why the forward model does not extend either the 24.6% endocrine CAGR or the 54.8% residual CAGR unchanged.

7. Management guidance

The data package contains four relevant exact management excerpts. There is no five-year rare-disease sales or margin target.

- **Q4 FY2025, Mike Doustdar, CEO - data_package §6 line 286:** “Rare disease is now positioned for sustained growth.” This is directional confidence, not a quantified guide. It supports a recovery case only if current launches and the late-stage pipeline translate into revenue.

- **Q3 FY2025, Mike Doustdar, CEO - data_package §6 line 287:** “we have now submitted Mim8 for regulatory approval in both U.S. and EU”. Filing reduces development timing risk but does not remove approval, label, reimbursement or switching risk. The base case includes a gradual denecimig contribution rather than an immediate step-up.

- **Q3 FY2025, Martin Lange, CSO - data_package §6 line 288:** “we are intensifying our focus on key therapeutic areas”. The context was Omeros/Akero portfolio fit. Zaltenibart is therefore treated as a funded strategic option, not current earnings.

- **Q1 FY2026, Mike Doustdar, CEO - data_package §6 line 289:** “the main aim is to make sure we have multiple legs to stand on”. This supports modeling existing-product recovery separately from risk-adjusted pipeline launches. It does not justify assuming all pipeline legs succeed together.

The factual milestone anchors are HIBISCUS success and a planned H2 2026 etavopivat filing, denecimig submission in the US and EU, and the licensed zaltenibart global phase 3 programme [data_package §6, line 291; §9, lines 343-353]. The absence of a quantified segment guide is material because management’s “sustained growth” language must be judged against a TTM margin of only 2.3% and against major competitors already commercialising convenient prophylaxis.

[DATA GAP: management provided no five-year Rare disease revenue CAGR, sales target, `Segment operating profit` **target or margin target in the reviewed source set.]**

[DATA GAP: a text transcript for the Q2 FY2026 call was unavailable; the data package uses the official release and presentation and includes no Q2 call-only quotation.]

8. Forward growth assumptions

The mutually exclusive TTM forecast anchors are DKK 2.315bn haemophilia A, DKK 1.354bn haemophilia B, DKK 7.027bn NovoSeven, DKK 0.770bn other rare blood/pipeline, DKK 7.158bn rare endocrine and DKK 1.813bn Other Rare disease. Their unrounded values sum to DKK 20.438bn; the displayed three-decimal anchors sum to DKK 20.437bn because of rounding. Product CAGRs below compound each unrounded anchor for exactly five years to 30 June 2031.

Base case growth

Product	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Base CAGR TTM→TTM+5y	Justification
Haemophilia A products	(0.17%)	(1.63%)	No numeric guide	2.0%	Stable legacy-factor demand partly offsets share loss; Hemlibra and ALTUVIIIO cap growth. New launches are confined to the pipeline line.
Haemophilia B products	15.36%	8.12%	No numeric guide	5.0%	Refixia momentum continues but slows as gene therapy and Qfitlia expand choice. New launches are confined to the pipeline line.
NovoSeven	(4.05%)	(8.23%)	No numeric guide	(4.0%)	Acute/rescue use persists, but prophylaxis and expired patents keep the line in structural decline.
Other rare blood and pipeline	54.82% from tiny residual	103.29% from tiny residual	Denecimig filed; no sales guide	26.0%	Alhemo, denecimig and risk-adjusted etavopivat drive growth; zaltenibart contributes only late and modestly.
Rare endocrine disorders	24.64%	19.35%	No numeric guide	8.0%	Sogroya rollout and label expansion continue, then decelerate as launch markets mature and weekly competitors scale.
Other Rare disease	4.51%	12.33%	No numeric guide	0.0%	Mature hormone-replacement brands remain broadly stable with no identified growth catalyst.

The base case is deliberately below the disclosed historical CAGRs for haemophilia B, the small other-blood residual and rare endocrine. The reason is not generic maturation. It is the combination of a larger sales base, direct convenient-dosing competition, expired legacy patents and no quantified management target. Conversely, the model assumes NovoSeven’s rate improves from the latest negative 8.2% because a clinically embedded rescue role remains even as prophylaxis grows.

The base annual cadence makes the implied deceleration explicit:

Product	Year 1	Year 2	Year 3	Year 4	Year 5	Five-year result
Haemophilia A products	1%	2%	2%	2%	3%	Approximately 2.0% CAGR
Haemophilia B products	6%	5%	5%	5%	4%	Approximately 5.0% CAGR
NovoSeven	(6%)	(5%)	(4%)	(3%)	(2%)	Approximately (4.0%) CAGR
Other rare blood and pipeline	10%	20%	30%	35%	37%	Approximately 26.0% CAGR
Rare endocrine disorders	12%	10%	8%	6%	4.2%	Approximately 8.0% CAGR
Other Rare disease	0%	0%	0%	0%	0%	0.0% CAGR

The other-blood cadence accelerates because the starting residual is only DKK 0.770bn and commercialization is staged: early Alhemo expansion, then denecimig, then risk-adjusted etavopivat. It does not imply a 26% CAGR for Novo's mature factor portfolio. Rare endocrine decelerates from 19.4% latest reported growth to low single digits by the horizon as the weekly-growth-hormone launch cycle matures.

Bull case growth

Product	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Bull CAGR TTM→TTM+5y	Justification
Haemophilia A products	(0.17%)	(1.63%)	No numeric guide	5.0%	Legacy factor demand and treatment-centre retention improve despite Hemlibra and ALTUVIIIO. New launches remain in the pipeline line.
Haemophilia B products	15.36%	8.12%	No numeric guide	8.0%	Refixia sustains growth near the latest rate despite gene-therapy substitution. New launches remain in the pipeline line.
NovoSeven	(4.05%)	(8.23%)	No numeric guide	(1.0%)	Rescue and surgery use prove stickier than expected despite active-ingredient patent expiry.
Other rare blood and pipeline	54.82% from tiny residual	103.29% from tiny residual	Denecimig filed; no sales guide	50.0%	Denecimig launches strongly, etavopivat earns broad access and zaltenibart succeeds early enough to contribute by 2031.
Rare endocrine disorders	24.64%	19.35%	No numeric guide	12.0%	Sogroya maintains launch-market leadership and label expansion drives switching across geographies.
Other Rare disease	4.51%	12.33%	No numeric guide	2.0%	Pricing and stable demand modestly outweigh mature-brand erosion.

The bull case is a multi-win case. It requires not merely approvals but differentiated labels, reimbursement and rapid specialist adoption. The 50% CAGR for the small pipeline line produces DKK 5.849bn by 2031, still a fraction of Hemlibra's current global scale after currency conversion. That makes the number commercially possible, but its joint probability across denecimig, etavopivat and zaltenibart is why the bull case receives only a 20% weight.

Bear case growth

Product	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Bear CAGR TTM→TTM+5y	Justification
Haemophilia A products	(0.17%)	(1.63%)	No numeric guide	(8.0%)	Hemlibra, ALTUVIIIO and other prophylaxis take share from the legacy factor line; failed launches are captured only in the pipeline line.
Haemophilia B products	15.36%	8.12%	No numeric guide	(2.0%)	Qfitlia and gene therapy reverse recent momentum while price/mix weakens.
NovoSeven	(4.05%)	(8.23%)	No numeric guide	(10.0%)	Prophylaxis sharply reduces rescue use and expired patents accelerate price pressure.

Product	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Bear CAGR TTM→TTM+5y	Justification
Other rare blood and pipeline	54.82% from tiny residual	103.29% from tiny residual	Denecimig filed; no sales guide	3.0%	Alhemo grows modestly, but denecimig/etavopivat launches slip and zaltenibart remains pre-commercial.
Rare endocrine disorders	24.64%	19.35%	No numeric guide	2.0%	Sogroya growth fades as Skytrofa/Ngenla constrain share and mature Norditropin erodes.
Other Rare disease	4.51%	12.33%	No numeric guide	(3.0%)	Mature hormone-replacement products face generic and tender pressure.

The bear case assumes competitor substitution is faster than pipeline replacement. Revenue contracts 3.3% annually even though rare endocrine remains slightly positive. This is more severe than recent segment history but not arbitrary: NovoSeven is 34% of TTM segment revenue on the allocation used here, and a 10% annual decline in that line overwhelms modest growth elsewhere.

9. Forward `Segment operating profit` margin assumptions

The current TTM margin on the exact sealed basis is 2.31%: DKK 0.473bn of `Segment operating profit` divided by DKK 20.438bn revenue [data_package §3a, lines 136-158]. Product margins are not disclosed, so the table below uses explicit analyst assumptions to calculate a revenue-weighted segment margin. These are not labelled gross margin, EBITA or product operating income.

Case	Product	TTM+5y revenue	Assumed `Segment operating profit` margin	TTM+5y `Segment operating profit`	Mechanism
Bear	Haemophilia A products	1.526	0%	0.000	Volume and price pressure eliminate contribution after fixed specialist costs.
Bear	Haemophilia B products	1.224	5%	0.061	Recent growth reverses while specialist infrastructure remains.
Bear	NovoSeven	4.149	15%	0.622	Mature-product contribution persists, but faster volume and price erosion reduce leverage.
Bear	Other rare blood and pipeline	0.893	(25%)	(0.223)	Delayed launches and continuing trials keep the line loss-making.
Bear	Rare endocrine disorders	7.903	8%	0.632	Weekly competition and continued launch spending leave only limited contribution.
Bear	Other Rare disease	1.557	5%	0.078	Mature products retain a small positive contribution under tender pressure.
Base	Haemophilia A products	2.556	15%	0.383	Stable legacy-factor revenue restores only partial fixed-cost absorption.
Base	Haemophilia B products	1.729	18%	0.311	Moderate Refixia growth supports utilisation without assuming launch contribution twice.
Base	NovoSeven	5.730	28%	1.604	The mature rescue franchise remains profitable despite volume decline and patent expiry.
Base	Other rare blood and pipeline	2.446	0%	0.000	Launch revenue reaches break-even after medical, access and commercial investment.
Base	Rare endocrine disorders	10.517	18%	1.893	Sogroya scale and switching improve mix, tempered by weekly-product competition.
Base	Other Rare disease	1.813	15%	0.272	Stable mature brands provide contribution without an unsupported premium margin.

Case	Product	TTM+5y revenue	Assumed Segment operating profit margin	TTM+5y Segment operating profit	Mechanism
Bull	Haemophilia A products	2.955	24%	0.709	Better retention improves price/mix and fixed-cost absorption in the legacy line.
Bull	Haemophilia B products	1.990	26%	0.517	Sustained Refixia growth absorbs specialist commercial costs.
Bull	NovoSeven	6.683	35%	2.339	Sticky rescue and surgery use preserves a high mature-brand contribution.
Bull	Other rare blood and pipeline	5.849	20%	1.170	Several launches scale through the existing platform but still carry royalties, milestones and lifecycle costs.
Bull	Rare endocrine disorders	12.615	28%	3.532	Sogroya leadership and label breadth generate mix and leverage below the FY2022 segment benchmark.
Bull	Other Rare disease	2.002	22%	0.440	Stable pricing supports mature-brand contribution without assuming a segment-leading margin.

Product margins are not issuer-disclosed and are allocation devices, so the segment-level scenario totals are bounded to disclosed segment history rather than to a fabricated allocation of the Q2 company-wide impairment. The TTM 2.31% anchor includes the DKK 1.246bn Rare disease share of the 340B reversal and an undisclosed share, if any, of the DKK 6.328bn company-wide Q2 pipeline impairment; neither item is assigned to products. The bear recovery to 6.78% is only 58 basis points above FY2025's 6.2% margin. It assumes those transitory items do not recur at the horizon, while weak volume and continuing trials keep the pipeline line loss-making.

The base recovery to 18.01% is anchored near FY2023's 17.2% margin rather than the 36.1% FY2022 peak. The 81-basis-point premium to FY2023 reflects a larger DKK 24.791bn revenue base, Sogroya mix and fixed specialist infrastructure growing more slowly than sales. The pipeline line is held at break-even after medical, access and commercial spending. Even on this tighter basis, `Segment operating profit` rises more than ninefold from DKK 0.473bn TTM to DKK 4.464bn, so margin recovery remains the dominant sensitivity rather than a hidden free option.

The bull recovery to 27.13% requires several successful launches sharing the existing platform and mature-product contribution persisting. It remains 897 basis points below the 36.1% FY2022 margin. This guards against treating pipeline sales as costless: denecimig, etavopivat and zaltenibart carry royalties, milestones, medical investment and ongoing lifecycle costs, and the pipeline line is capped at a 20% margin.

10. Segment rollup

The rollup compounds each TTM anchor for exactly five years. Product revenue sums to segment revenue. Product `Segment operating profit` sums to segment `Segment operating profit`; the blended margin is profit divided by revenue. Rounding residuals are below 0.01%.

Case	Product	TTM anchor	Five-year CAGR	TTM+5y revenue	Segment operating profit margin	TTM+5y Segment operating profit
Bear	Haemophilia A products	2.315	(8.0%)	1.526	0%	0.000
Bear	Haemophilia B products	1.354	(2.0%)	1.224	5%	0.061
Bear	NovoSeven	7.027	(10.0%)	4.149	15%	0.622
Bear	Other rare blood and pipeline	0.770	3.0%	0.893	(25%)	(0.223)
Bear	Rare endocrine disorders	7.158	2.0%	7.903	8%	0.632
Bear	Other Rare disease	1.813	(3.0%)	1.557	5%	0.078
Bear total	**Rare disease**	**20.438**	**(3.33%) blended**	**17.252**	**6.78%**	**1.170**
Base	Haemophilia A products	2.315	2.0%	2.556	15%	0.383
Base	Haemophilia B products	1.354	5.0%	1.729	18%	0.311
Base	NovoSeven	7.027	(4.0%)	5.730	28%	1.604

Case	Product	TTM anchor	Five-year CAGR	TTM+5y revenue	`Segment operating profit` **margin**	**TTM+5y** `Segment operating profit`
Base	Other rare blood and pipeline	0.770	26.0%	2.446	0%	0.000
Base	Rare endocrine disorders	7.158	8.0%	10.517	18%	1.893
Base	Other Rare disease	1.813	0.0%	1.813	15%	0.272
Base total	**Rare disease**	**20.438**	**3.94% blended**	**24.791**	**18.01%**	**4.464**
Bull	Haemophilia A products	2.315	5.0%	2.955	24%	0.709
Bull	Haemophilia B products	1.354	8.0%	1.990	26%	0.517
Bull	NovoSeven	7.027	(1.0%)	6.683	35%	2.339
Bull	Other rare blood and pipeline	0.770	50.0%	5.849	20%	1.170
Bull	Rare endocrine disorders	7.158	12.0%	12.615	28%	3.532
Bull	Other Rare disease	1.813	2.0%	2.002	22%	0.440
Bull total	**Rare disease**	**20.438**	**9.44% blended**	**32.093**	**27.13%**	**8.708**

Bear arithmetic: DKK 1.526bn + 1.224bn + 4.149bn + 0.893bn + 7.903bn + 1.557bn = DKK 17.252bn. Unrounded product profits sum to DKK 1.170bn, and profit divided by unrounded revenue equals 6.78%. The DKK 0.223bn loss in Other rare blood and pipeline remains explicit.

Base arithmetic: DKK 2.556bn + 1.729bn + 5.730bn + 2.446bn + 10.517bn + 1.813bn = DKK 24.791bn. Unrounded product profits sum to DKK 4.464bn, and profit divided by unrounded revenue equals 18.01%.

Bull arithmetic: DKK 2.955bn + 1.990bn + 6.683bn + 5.849bn + 12.615bn + 2.002bn = DKK 32.094bn before display rounding and DKK 32.093bn on the unrounded model. Unrounded product profits sum to DKK 8.708bn, and profit divided by unrounded revenue equals 27.13%. The displayed DKK 0.001bn revenue difference is rounding only.

The base case is not a high-growth segment thesis. Revenue compounds at 3.94%, only modestly above inflation, because NovoSeven erosion offsets rare endocrine and pipeline growth. The investment relevance is operating recovery: `Segment operating profit` rises from DKK 0.473bn TTM to DKK 4.464bn. This remains a demanding recovery even though the 18.01% margin is anchored near FY2023 rather than FY2022. Synthesis should therefore treat margin recovery, not revenue CAGR, as the dominant Rare disease sensitivity.

11. Key risks and wildcards

- **Denecimig launch quality - Base/Bull.** Approval alone is insufficient. The key variables are label, bleed protection, dosing flexibility, switching from Hemlibra or factor products, treatment-centre confidence and payer access. Slow uptake would reduce both the other-blood revenue line and the assumed margin leverage.

- **NovoSeven structural decline - Bear.** NovoSeven is approximately one-third of TTM segment revenue in the model allocation. Its active-ingredient patents are expired in major markets, and better prophylaxis can reduce rescue use. A decline faster than 10% would push the bear case below DKK 17bn revenue unless pipeline contribution arrives.

- **Sogroya competition - Base/Bear.** Weekly administration is attractive, but Skytrofa and Ngenla mean convenience is not unique. Failure to retain patients switching from Norditropin, or aggressive tender pricing, would make the base 8% endocrine CAGR too high.

- **Etavopivat differentiation - Bull/Bear.** HIBISCUS success supports filing, but mitapivat and curative approaches raise the efficacy and value threshold. Delayed approval, a narrow label or poor reimbursement would defer the modeled acceleration in other rare blood.

- **Zaltenibart programme and complement competition - Bull.** The asset begins from phase 2 and must enter a market with entrenched C5 inhibition and fast-growing oral competitors. The base case contains only modest late contribution; the bull case requires a meaningful 2031 launch ramp.

- **Pipeline impairment and capital discipline - Bear.** The TTM margin shows that a small segment can absorb substantial development charges. Another failed acquired asset or prolonged phase 3 spend could leave `Segment operating profit` near breakeven even if sales remain stable.

- **Supply and quality - All cases.** Rare biologics require reliable production and quality control. Small patient populations do not eliminate batch-release, device or cold-chain risk; a disruption can quickly affect treatment centres and trust. Conversely, the segment may benefit if group manufacturing investments improve redundancy, but no rare-disease capacity-by-product data are disclosed.

- **Price and reimbursement - Bear.** Rare-disease pricing power is conditional on differentiated outcomes. Governments and payers can require outcomes evidence, rebates or sequencing after cheaper therapies. More convenient competitors can turn an access negotiation into a price negotiation.

- **Portfolio concentration - All cases.** Rare disease is only 6%-7% of group revenue, but within the segment NovoSeven and rare endocrine dominate. “Multiple legs” remain a management objective, not yet a demonstrated revenue mix. A single launch miss can therefore change the five-year margin path disproportionately.

- **Model disclosure limitation - All cases.** Product-level profit, TTM product sales and brand-level net price are not disclosed. The appendix uses transparent allocations and scenario margins, but synthesis should not mistake those estimates for issuer-reported granularity.

Summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	DKK 17.252bn	`Segment operating profit`	6.78%	DKK 1.170bn	30%
Base	DKK 24.791bn	`Segment operating profit`	18.01%	DKK 4.464bn	50%
Bull	DKK 32.093bn	`Segment operating profit`	27.13%	DKK 8.708bn	20%

The rare-disease thesis is a margin-recovery and pipeline-conversion thesis, not a continuation of historic headline growth. The current franchise contains resilient specialist capabilities but also mature, patent-expired products and unusually weak reported profitability. Base-case revenue growth is modest because the model forces new products to replace NovoSeven erosion before they create net acceleration. A credible upside case exists if denecimig, etavopivat and Sogroya scale together; a credible downside exists if convenient competing therapies take share while launch spending remains high. The moat is therefore moderate and conditional on commercial execution.

Appendix S - Synthesis (Combined Earnings Model)

Novo Nordisk - Synthesis (Combined Earnings Model)

This appendix mechanically consolidates the two reviewed reportable-segment models into a company earnings model for the exact five-year period from 30 June 2026 to 30 June 2031. It uses only the hash-verified upstream artifacts in `C:\Users\Admin\OneDrive\GPT\ER 2.0\Novo Nordisk`; it does not re-fetch evidence, change an accounting classification, allocate an undisclosed group item, or insert a balancing plug. All currency amounts are DKK billions unless stated otherwise. Displayed values are rounded, while every pass/fail test is evaluated against the underlying calculation or the upstream model's documented rounding tolerance.

1. Anchors

- **Report date:** 2026-09-09, held immutable for this run.
- **Fiscal year end:** 31 December.
- **TTM anchor:** 2026-06-30, constructed as FY2025 less H1 2025 plus H1 2026. This cumulative interim bridge uses identical six-month periods and no overlapping quarter.
- **Latest completed FY:** FY2025, used only as the historical tie-out.
- **Horizon:** 2031-06-30, exactly 5.0 calendar years after the TTM end. No forecast row compounds for six fiscal years.
- **Valuation anchor:** DKK 288.90 for one ordinary Novo Nordisk B share on `XCSE:NOVO-B`, a raw exchange close for 2026-09-09. The raw-source hash is `1d2eb333254d9a592a9cec132a126d1df37d4c070383c38dd7b192d8ebacc227`; the QFR-sealed quote-packet hash is `1eaf4c353ff75dad6f9e6ac4bdc6484b6faf333d1e78a20625b7e7279ecfade0`; actionability expiry is `2026-09-10T23:10:00+08:00`.
- **Reporting and quote currency:** DKK in both cases. Session-date FX is therefore 1.000000 DKK quoted per DKK reported, with source `IDENTITY_SAME_CURRENCY` dated 2026-09-09.
- **Security unit bridge:** financial-statement shares are post-13-September-2023 DKK 0.10 A or B ordinary shares. The quoted B share is one ordinary share, not an ADR. Depositary factor 1.000000 multiplied by share-class factor 1.000000 gives 1.000000 financial share per listed unit.
- **Split and share bridge:** 4,442.2 million financial-statement diluted shares at 2026-06-30 multiplied by a no-intervening-split factor of 1.000000 equals 4,442.2 million quote-basis diluted financial shares. Dividing by the 1.000000 listed-unit factor gives 4,442.2 million listed-equivalent units. The split evidence hash is `26a22e5d0dace520eab46ac1469ccc10619ca1c5fdac48b2dc4ededd8f8aad3f`.
- **Historical statutory bridge:** SHA-256 `d0b9c1cdcfe8d679ae40ec1db084cd3ba50bead6e8b9057140d5cd35cc251610`. The installed validator returned `STATUTORY_BRIDGE_VALID`, the byte hash matched, and the durable gate manifest records `STATUTORY BRIDGE VERIFIED - CLEARED FOR FORECASTING` with no unresolved item.
- **Industry lane:** `NOT TRIGGERED - issuer is not a P&C insurer or reinsurer`. No insurer return bridge is created.

The strict quote validator was run at an aware SGT time before packet expiry and returned `QUOTE_PACKET_VALID` with the exact sealed hash. The statutory validator independently returned `STATUTORY_BRIDGE_VALID` with the exact QFR/DR hash. The horizon date is the date arithmetic result of adding five calendar years to 2026-06-30. These checks fix price, period, share unit, and currency before any valuation arithmetic.

2. Segment-level forward assumptions

The segment values below are reproduced, not re-derived. Obesity and Diabetes care uses its reviewed normalized operating-revenue base for forward forecasting while preserving reported TTM revenue and profit separately as statutory history. Rare disease uses the reviewed TTM anchor because the upstream review did not allocate the group pipeline impairment or brand-level event adjustments to products. Both segment appendices forecast the exact issuer-disclosed metric

`Segment operating profit`.

Segment	Exact profit metric	TTM revenue, DKK bn	Bear TTM+5y revenue	Base TTM+5y revenue	Bull TTM+5y revenue	Bear profit margin	Base profit margin	Bull profit margin
Obesity and Diabetes care	Segment operating profit	308.993 reported; 283.479 normalized operating anchor	256.170	353.845	448.093	29.2%	41.3%	47.7%
Rare disease	Segment operating profit	20.438	17.252	24.791	32.093	6.78%	18.01%	27.13%

Source audit trail: Obesity and Diabetes care comes from `appendix_B_obesity_diabetes_care.md` Sections 2, 8, 9 and 10. Rare disease comes from `appendix_B_rare_disease.md` Sections 2, 8, 9 and 10. Both post-review hashes match the root-supplied and durable gate records: `9ed08f8f2e8a9be8c3a499654b84ff8701a0753c2054f51cff80f20f7e01620e` and `c12ba83831a8c5b31876a8b4c169984fa53ddb124f41f959b50e59bac0d7f4f3` respectively.

The obesity/diabetes forward model begins with DKK 283.479bn after removing its DKK 25.514bn allocation of the non-recurring 340B reversal. The historical segment profit remains DKK 141.624bn. The recurring profit normalization uses only the identified DKK 4.000bn monlunabant impairment addback, producing DKK 120.110bn on the normalized revenue base. The unallocated DKK 2.328bn balance of group pipeline impairments is not assigned to the segment and is retained only as an upper sensitivity in the reviewed appendix. It does not enter this combined base model.

No-double-counting is explicit. Obesity and Diabetes care's marketed GLP-1 diabetes, insulin, other diabetes, and existing obesity rows cover current therapies. Its future-launch row adds only net terminal pipeline revenue after subtracting within-Novo displacement: DKK 3bn bear, DKK 15bn base, and DKK 30bn bull. The corresponding gross launch assumptions are DKK 6bn, DKK 25bn, and DKK 42bn, less DKK 3bn, DKK 10bn, and DKK 12bn of cannibalisation. Only the net column is included in revenue and profit once.

Rare disease's six forecast rows are mutually exclusive. Haemophilia A, haemophilia B, and NovoSeven contain legacy/current products only. Alhemo, denecimig, risk-adjusted etavopivat, and late zaltenibart exposure enter solely through `Other rare blood and pipeline`. They do not also appear in a legacy row. Rare endocrine and Other Rare disease are separately disclosed or arithmetically isolated categories. Therefore no Alhemo or denecimig sales are counted twice.

3. Combined revenue build

Novo reports no corporate revenue eliminations between these two reportable segments. The sealed statutory bridge contains empty corporate/unallocated and operating-bridge arrays, so the horizon model simply adds reviewed segment revenue. The modeled TTM operating base is DKK 303.917bn, consisting of DKK 283.479bn normalized Obesity and Diabetes care plus DKK 20.438bn Rare disease. The DKK 25.514bn difference from consolidated statutory TTM revenue is the specifically allocated obesity/diabetes 340B reversal removed upstream; the rare appendix preserves its own reviewed anchor and no further undisclosed adjustment is made here.

Line	Bear	Base	Bull
Obesity and Diabetes care TTM+5y revenue	256.170	353.845	448.093
Rare disease TTM+5y revenue	17.252	24.791	32.093
Sum of segment TTM+5y revenue	273.422	378.636	480.186
Corporate eliminations	0.000	0.000	0.000
Combined TTM+5y revenue	**273.422**	**378.636**	**480.186**
Implied modeled TTM 2026-06-30 to TTM+5y 2031-06-30 CAGR	(2.08%)	4.49%	9.57%

The bear is not a demand-disappearance scenario. It assumes that pricing and share losses in cardiometabolic products outweigh obesity volume growth and that rare-pipeline replacement arrives too slowly. Base assumes obesity volume, oral adoption, and access offset price erosion while mature rare products decline and launch economics recover gradually. Bull requires durable injectable strength, effective oral expansion, several successful pipeline launches, high capacity utilisation, a 46.31% group operating margin, and-in the downstream VP-locked return model-a 20× terminal P/E.

The segment builders' original probabilities were **30% Bear / 50% Base / 20% Bull**. Those priors are preserved here solely as an audit record and are **non-controlling** after red-team review. The red-team appendix, SHA-256 `56a7ad88b705a8b8f32e1d651f380b5cdaed8367eeae922259f73f4440e318d8`, classified the 20% Bull calibration as `MATERIAL_UNRESOLVED`: Bull bundles correlated efficacy, market-share, price-volume, pipeline, margin, utilisation, buyback, and valuation wins without a joint-probability bridge. This repaired synthesis therefore establishes **30% Bear / 60% Base / 10% Bull** as the controlling post-red-team consolidated decision and return probabilities. No Bear, Base, or Bull operating value changes.

Probability weighting is performed across the three unchanged scenarios using the controlling weights: `0.30 × 273.422 + 0.60 × 378.636 + 0.10 × 480.186 = DKK 357.2268bn`. This probability-weighted revenue is not a fourth operating case and does not change the binary base-case P/E gate.

4. Combined operating income build

The common segment metric is statutory `Segment operating profit`. No segment uses EBITDA, adjusted EBITA, gross profit, or an analyst-created proxy. There are no projected corporate/unallocated adjustments or operating-bridge adjustments because the sealed latest-FY and TTM arrays are empty. Financial income, financial expense, and tax remain below operating income and are modeled separately in Section 5.

Line	Bear	Base	Bull
Obesity and Diabetes care Segment operating profit	74.872	146.273	213.666
Rare disease Segment operating profit	1.170	4.464	8.708
Sum of segment TTM+5y profit on sealed common metric	76.042	150.737	222.374
Corporate/unallocated adjustments from sealed bridge	0.000	0.000	0.000
Consolidated TTM+5y Segment operating profit	76.042	150.737	222.374
Operating bridge adjustments from sealed bridge	0.000	0.000	0.000
Combined statutory TTM+5y operating income	**76.042**	**150.737**	**222.374**
Implied statutory operating margin	27.81%	39.81%	46.31%

Every operating line follows `data_package.md` Section 3a. Obesity and Diabetes care is independently forecast from reviewed product revenue and margin paths. Rare disease is independently forecast on the same exact metric. Corporate/unallocated and operating adjustments remain zero because the sealed bridge has no such lines; zero is not used as an unexplained plug. Probability-weighted operating income is `0.30 × 76.042 + 0.60 × 150.737 + 0.10 × 222.374 = DKK 135.4922bn`. Dividing by probability-weighted revenue of DKK 357.2268bn gives a 37.93% weighted operating margin.

The base margin is below the reported statutory TTM margin of 43.13% because the TTM included the 340B reversal and other event-heavy effects. Relative to the narrower recurring operating anchor, base incorporates continuing price erosion, lower-margin oral mix, R&D, launch spending, and depreciation from capacity investment. The bull margin requires high utilisation and a favorable pipeline/product mix; the bear margin captures price pressure, weak utilisation, and continued failed-launch cost. None of these mechanics moves a below-line item into segment profit.

5. Net income and EPS build

The below-line schedule is conservative and mechanically linked to the reviewed driver ledger. TTM financial income was DKK 8.288bn, financial expense was DKK 1.636bn, and H1 2026 gross borrowings including leases were DKK 140.127bn. Management's 2026 outlook called for a net financial loss of about DKK 1.1bn. At the horizon, bear assumes DKK 4bn income and DKK 12bn expense; base assumes DKK 5bn and DKK 9bn; bull assumes DKK 7bn and DKK 6bn. These paths represent lower hedge/cash yield and higher debt cost in bear, gradual normalization in base, and deleveraging/favorable yield in bull. They are below-line assumptions, not operating adjustments. Tax rates reproduce the reviewed 23% bear, 22% base, and 21% bull rules.

Line	Bear	Base	Bull
Combined TTM+5y operating income	76.042	150.737	222.374
Financial expense / net interest cost	(12.000)	(9.000)	(6.000)
Financial income / other income	4.000	5.000	7.000
Pre-tax income	**68.042**	**146.737**	**223.374**
Tax rate assumed	23.0%	22.0%	21.0%
Income taxes	(15.650)	(32.282)	(46.909)
Net income	**52.39234**	**114.45486**	**176.46546**
Quote-basis diluted financial shares at TTM+5y, million	4,356.563434	4,249.360615	4,202.657909
EPS in DKK per quote-basis financial share	12.026071	26.934607	41.989014
Financial shares per listed unit	1.000000	1.000000	1.000000
EPS in DKK per listed unit	12.026071	26.934607	41.989014
FX, quote DKK per reporting DKK	1.000000	1.000000	1.000000
EPS in quote currency per listed unit at TTM+5y	**12.026071**	**26.934607**	**41.989014**

The required identities are exact. For bear, `52.39234 × 1,000 ÷ 4,356.563434 = DKK 12.026071`. For base, `114.45486 × 1,000 ÷ 4,249.360615 = DKK 26.934607`. For bull, `176.46546 × 1,000 ÷ 4,202.657909 = DKK 41.989014`. Each result then multiplies by 1.000000 financial share per listed unit and 1.000000 DKK/DKK FX, leaving the same quote-currency EPS. No ADR conversion is used.

Probability-weighted net income is DKK 102.037164bn. Probability-weighted EPS is correctly computed as the probability-weighted average of scenario EPS because scenario share paths differ: `0.30 × 12.026071 + 0.60 × 26.934607 + 0.10 × 41.989014 = DKK 23.967487`. It is not calculated by dividing weighted net income by weighted shares, which would mix mutually exclusive scenario denominators.

5a. Return-method input bridge

Synthesis prepares reconciled inputs; it does not select the final primary valuation method, exit multiple, or capital-structure treatment reserved for valuation preflight and compounder scoring. The EPS/P-E path is fully available. EV/NOPAT is not allowed to control at this stage because the reviewed inputs do not supply a source-bound five-year cash, debt, lease, and other-claim roll-forward. No residual net-debt plug is created.

Return-method input at 2031-06-30	Bear	Base	Bull	Source or treatment
Statutory operating income, DKK bn	76.042	150.737	222.374	Section 4, exact segment consolidation
Normalized cash tax rate	23.0%	22.0%	21.0%	Data package Section 3a forecast-driver schedule
Normalized NOPAT, DKK bn	58.55234	117.57486	175.67546	OI multiplied by one minus tax rate
Terminal cash	Unavailable	Unavailable	Unavailable	H1 2026 anchor DKK 44.482bn; no sealed terminal path
Terminal gross debt including leases	Unavailable	Unavailable	Unavailable	H1 2026 anchor DKK 140.127bn; no sealed terminal path
Terminal lease liabilities	Unavailable	Unavailable	Unavailable	H1 2026 anchor DKK 8.622bn; no sealed terminal path
Preferred equity	0 identified	0 identified	0 identified	No preferred claim identified in reviewed package; VP must confirm
Minority interest	0 identified	0 identified	0 identified	No material NCI claim identified in reviewed package; VP must confirm
Other senior claims	Unavailable	Unavailable	Unavailable	No terminal claim schedule in reviewed inputs

Return-method input at 2031-06-30	Bear	Base	Bull	Source or treatment
Separately valued non-operating assets	Unavailable	Unavailable	Unavailable	No separate terminal valuation supplied upstream
Diluted listed-equivalent shares, million	4,356.563434	4,249.360615	4,202.657909	Section 6, unit factors both 1.000000

The absence of a terminal balance-sheet schedule is an explicit availability finding, not a failed statutory tie-out. It prevents this synthesis from pretending an enterprise-to-equity bridge is complete. The complete EPS bridge remains valid for the P/E 15 entry gate and for later PE-method consideration, subject to valuation preflight locking reported-versus-normalized comparability and independently supported exit multiples.

5f. Company-level free-cash-flow logic

TTM comparable operating cash flow was DKK 132.774bn, PP&E capex was DKK 56.043bn, and core FCF was DKK 76.731bn. The TTM core-FCF-to-net-income conversion was 65.90%; FY2025 conversion was 57.56% while major capacity projects were underway. The terminal scenario diagnostic therefore uses 55% bear, 70% base, and 80% bull conversion of net income. The rise is not a revenue plug: it represents different outcomes for working capital, capacity utilisation, and the expected decline in capex intensity as current projects complete.

FCF line at 2031-06-30	Bear	Base	Bull	Probability-weighted
Net income, DKK bn	52.39234	114.45486	176.46546	102.037164
Core FCF conversion	55%	70%	80%	Scenario-weighted
Core FCF, DKK bn	**28.815787**	**80.118402**	**141.172368**	**70.833014**
Terminal dividend per share, DKK	5.00	16.00	22.00	13.30 weighted
Terminal dividend cash, DKK bn	21.783	67.990	92.458	56.575 weighted
Terminal buyback cash, DKK bn	5.000	20.000	35.000	17.000 weighted

Bear terminal dividend plus buyback cash is approximately DKK 26.783bn, below DKK 28.816bn terminal core FCF. Base cash return of about DKK 87.990bn modestly exceeds the one-year terminal FCF diagnostic and would require cash timing or a slower buyback; because the buyback is flexible and proposal-only, this is not treated as a guaranteed distribution. Bull cash return of about DKK 127.458bn remains below DKK 141.172bn FCF. Only per-share dividends enter the gross shareholder-wealth bridge below. Buybacks affect returns solely through shares retired, avoiding double counting.

6. Share count path

The path starts from the quote packet’s 4,442.2 million quote-basis diluted financial shares, not ADR units and not FY2025’s older average. TTM share-based payments of DKK 0.972bn divided by the DKK 288.90 quote gives 3.364 million shares; the model rounds this to 3.4 million annual equivalent issuance in every scenario. This is a disclosed approximation and is conservative relative to the declining historical diluted-share count. Repurchases are scenario-dependent and remain subordinate to R&D, capacity, dividends, and business development.

Case / year	Starting quote-basis shares, M	Buyback, DKK bn	Average price, DKK	Shares retired, M	SBC issuance, M	Ending quote-basis shares, M
Bear Y1	4,442.200000	5.000	260	19.230769	3.400000	4,426.369231
Bear Y2	4,426.369231	5.000	240	20.833333	3.400000	4,408.935897
Bear Y3	4,408.935897	5.000	230	21.739130	3.400000	4,390.596767
Bear Y4	4,390.596767	5.000	240	20.833333	3.400000	4,373.163434
Bear Y5	4,373.163434	5.000	250	20.000000	3.400000	4,356.563434
Base Y1	4,442.200000	10.000	300	33.333333	3.400000	4,412.266667
Base Y2	4,412.266667	12.000	320	37.500000	3.400000	4,378.166667
Base Y3	4,378.166667	15.000	350	42.857143	3.400000	4,338.709524
Base Y4	4,338.709524	18.000	380	47.368421	3.400000	4,294.741103
Base Y5	4,294.741103	20.000	410	48.780488	3.400000	4,249.360615

Case / year	Starting quote-basis shares, M	Buyback, DKK bn	Average price, DKK	Shares retired, M	SBC issuance, M	Ending quote-basis shares, M
Bull Y1	4,442.200000	15.000	340	44.117647	3.400000	4,401.482353
Bull Y2	4,401.482353	20.000	400	50.000000	3.400000	4,354.882353
Bull Y3	4,354.882353	25.000	470	53.191489	3.400000	4,305.090864
Bull Y4	4,305.090864	30.000	550	54.545455	3.400000	4,253.945409
Bull Y5	4,253.945409	35.000	640	54.687500	3.400000	4,202.657909

The arithmetic is explicit. Bear retirement totals 102.636565 million, so `4,442.2 − 102.636565 + 17.0 = 4,356.563435`. Base retires 209.839385 million and issues 17.0 million, ending at 4,249.360615 million. Bull retires 256.542091 million and issues 17.0 million, ending at 4,202.657909 million. Each year independently satisfies starting shares minus retired shares plus issuance equals ending shares.

The quote-basis, listed-unit, and reporting-share factors are all 1.000000. Consequently, these ending financial-share figures are numerically identical to listed-equivalent units. Repurchase assumptions are consistent with the observed range: DKK 19.4bn to DKK 29.9bn in 2021-2023, DKK 20.2bn in 2024, DKK 1.4bn in 2025, and the current 2026 authorization of up to DKK 15bn. Bear preserves liquidity; base returns to a moderate historical pace; bull scales repurchases only after stronger FCF appears.

7. P/E 15 test

Required EPS for a 15× P/E at the immutable DKK 288.90 quote is `288.90 ÷ 15 = DKK 19.260000` per listed unit. Cushion is `(EPS × 15 − 288.90) ÷ 288.90`. The base case controls the binary gate.

Case	EPS in DKK per listed unit at TTM+5y	EPS multiplied by 15	Quote-packet price	Cushion	Pass?
Bear	12.026071	180.391061	288.90	(37.56%)	FAIL
Base	26.934607	404.019111	288.90	39.85%	PASS
Bull	41.989014	629.835204	288.90	118.01%	PASS
Probability-weighted EPS diagnostic	23.967487	359.512306	288.90	24.44%	Not the gate

The binary result is **PASS - 39.85% base-case cushion**. Bear fails, which is economically meaningful: a downside outcome can destroy value even though the confident/base case clears. Bull does not rescue a failed base and is not used to set the verdict. The gate tests entry valuation only; it is not an independently justified exit multiple for final security-return underwriting.

7a. Finite gross-local return bridge required for synthesis

To keep the synthesis mechanically finite before valuation preflight, this table uses the same 15× multiple as a clearly labeled **constant-gate-multiple sensitivity**, not as the eventual primary method or an independently justified scenario exit multiple. VP and CS must not treat these 15× figures as locked valuation inputs. Only PE is used in this sensitivity; no cash/debt adjustment is added, and buybacks enter only through diluted shares. Dividends enter once as cumulative cash distributions per share.

Case	Probability	Terminal EPS, DKK	Diagnostic terminal P/E	Terminal value, DKK	Cumulative dividends, DKK	Terminal wealth, DKK	Gross local annualized return
Bear	30%	12.026071	15.0× gate sensitivity	180.391061	40.700000	221.091061	(5.21%)
Base	60%	26.934607	15.0× gate sensitivity	404.019111	67.200000	471.219111	10.28%
Bull	10%	41.989014	15.0× gate sensitivity	629.835204	79.700000	709.535204	19.69%
Probability-weighted wealth	100%	23.967487 weighted	15.0× gate sensitivity	359.512306 weighted	60.500000 weighted	420.012306 weighted	7.77%

Each scenario return is `(terminal wealth ÷ 288.90)^(1/5) − 1`. Under the controlling post-red-team weights, probability-weighted terminal wealth is `0.30 × 221.091061 + 0.60 × 471.219111 + 0.10 × 709.535204 = DKK 420.012306`. The constant-15× sensitivity's probability-weighted gross local return is therefore `(420.012306 ÷ 288.90)^(1/5) − 1 = 7.77%`. It is not the arithmetic average of scenario IRRs. The non-controlling 30%/50%/20% weights produced DKK 443.843915 and 8.97% in this sensitivity; they are retained here only to make the repair auditable.

The downstream VP-locked PE return model uses scenario terminal wealth of DKK 160.960707 Bear, DKK 471.219111 Base, and DKK 919.480272 Bull at 10×/15×/20× respectively. Applying the same controlling 30%/60%/10% weights produces DKK 422.967706 probability-weighted wealth and a 7.92% gross local IRR, versus DKK 467.793822 and 10.12% under the non-controlling priors. This 2.20-percentage-point reduction is the red-team materiality result. The scenario wealth amounts and multiples are not changed by this probability repair.

Dividend paths are explicit: bear DKK 11.70, 10.00, 8.00, 6.00, and 5.00; base DKK 11.70, 12.00, 13.00, 14.50, and 16.00; bull DKK 11.70, 13.00, 15.00, 18.00, and 22.00. The starting DKK 11.70 equals the FY2025 dividend per share. Bear allows a cut as earnings and cash conversion weaken. Base resumes gradual growth. Bull permits faster growth only with higher earnings and FCF. These are scenario distributions for this sensitivity, not management guidance.

8. Reflexivity check

The sealed historical bridge ties without adjustment. FY2025 reportable segment revenue is DKK 289.456bn plus DKK 19.608bn, exactly DKK 309.064bn consolidated revenue. FY2025 segment profit is DKK 126.446bn plus DKK 1.212bn, exactly DKK 127.658bn statutory operating income. There is no corporate or operating bridge line.

For TTM, reported segment revenue is DKK 308.993bn plus DKK 20.438bn, exactly DKK 329.431bn consolidated revenue. Segment operating profit is DKK 141.624bn plus DKK 0.473bn, exactly DKK 142.097bn statutory operating income. The revenue and profit residuals are DKK 0.000bn. Below the line, DKK 142.097bn plus DKK 8.288bn financial income less DKK 1.636bn financial expenses equals DKK 148.749bn pretax income; less DKK 32.306bn tax equals DKK 116.443bn net income. The disclosed bridge tolerances are DKK 65.27m for FY2025 and DKK 74.3745m for TTM; actual residuals are zero.

The model compounds the reviewed operating bases rather than event-inflated consolidated revenue. The DKK 25.514bn obesity/diabetes 340B adjustment explains the principal difference from reported TTM. The reviewed rare segment retains its own event-heavy DKK 20.438bn anchor because no product-level allocation was supplied. This is disclosed, not silently scaled. The DKK 4.000bn monlunabant addback is used only to describe recurring obesity/diabetes profitability and is not added to terminal revenue, terminal profit, or cash flow.

The base first-forward-year revenue run-rate is DKK 290.530bn for Obesity and Diabetes care plus approximately DKK 21.055bn for Rare disease, or DKK 311.585bn. That is 2.52% above the DKK 303.917bn modeled operating base and 5.42% below DKK 329.431bn reported statutory TTM revenue. Both comparisons are within 10%. A first-year base operating-profit illustration using 41.5% obesity/diabetes margin and 8.0% rare margin is about DKK 122.25bn, 1.38% above the DKK 120.583bn recurring lower operating anchor. It is 13.96% below reported TTM OI only because the reported period included the quantified 340B reversal and event-heavy impairment timing; the source-bound adjustment supports the step-down.

9. Latest interim bridge reconciliation

The cumulative interim method is triggered. The controlling arithmetic is FY2025 less H1 2025 plus H1 2026, with both interim periods covering 1 January through 30 June. Revenue is `309.064 − 154.944 + 175.311 = DKK 329.431bn`. Operating income is `127.658 − 72.240 + 86.679 = DKK 142.097bn`. Pretax income is `130.540 − 70.838 + 89.047 = DKK 148.749bn`. Net income is `102.434 − 55.537 + 69.546 = DKK 116.443bn`. PP&E capex is `60.140 − 28.083 + 23.986 = DKK 56.043bn`.

The share denominator uses the weighted-average convention rather than summing EPS: FY2025 4,447.7 million less one-half of H1 2025's 4,446.9 million plus one-half of H1 2026's 4,442.2 million equals 4,445.35 million TTM diluted shares. DKK 116.443bn divided by 4,445.35 million equals DKK 26.1943 TTM EPS. H1 periods are like-for-like; no Q1 or Q2 standalone value is added on top of H1; no overlap exists.

10. Sensitivity

The table varies one input around base while holding the other base inputs fixed. Obesity and Diabetes care uses its 4.5342% constant-equivalent five-year CAGR as the central point; the actual reviewed annual cadence remains the preferred model. Rare disease varies only its exact `Segment operating profit` margin. The share and tax tests preserve base NI or pretax income as appropriate.

Sensitivity	Downside setting	Downside EPS, DKK	Base EPS, DKK	Upside setting	Upside EPS, DKK	Interpretation
Obesity and Diabetes care equivalent revenue CAGR	2.5342%, down 200 bps	24.430923	26.934607	6.5342%, up 200 bps	29.565006	Largest operating sensitivity

Sensitivity	Downside setting	Downside EPS, DKK	Base EPS, DKK	Upside setting	Upside EPS, DKK	Interpretation
Rare disease Segment operating profit margin	16.01%, down 200 bps	26.843754	26.934607	20.01%, up 200 bps	27.025776	Small group-level effect
Ending diluted shares	5% higher	25.652007	26.934607	5% lower	28.352218	Material per-share sensitivity
Tax rate	25%, up 300 bps	25.898661	26.934607	19%, down 300 bps	27.970554	Secondary sensitivity

The obesity/diabetes revenue path and ending share count dominate. The rare segment's recovery is important to segment quality, but a two-point change in its margin moves group EPS by only about DKK 0.091. A 200-basis-point change in the large segment's equivalent CAGR moves base EPS by roughly DKK 2.50 to DKK 2.63. A 5% share-count change moves EPS by about DKK 1.28 to DKK 1.42. Consequently, pricing/share in GLP-1 and capital-allocation discipline are the most useful kill/trigger variables.

11. Combined earnings summary

Case	Revenue, DKK bn	OI, DKK bn	OI margin	NI, DKK bn	EPS, DKK per listed unit	Probability	EPS multiplied by 15	Versus DKK 288.90
Bear	273.422	76.042	27.81%	52.39234	12.026071	30%	180.391061	(37.56%)
Base	378.636	150.737	39.81%	114.45486	26.934607	60%	404.019111	39.85%
Bull	480.186	222.374	46.31%	176.46546	41.989014	10%	629.835204	118.01%
Probability-weighted diagnostic	357.2268	135.4922	37.93%	102.037164	23.967487	100%	359.512306	24.44%

Controlling weights are 30% Bear, 60% Base, and 10% Bull after the red-team probability repair. The segment builders' 30%/50%/20% priors remain documented but non-controlling. The change assigns the removed ten Bull points to Base rather than Bear because the red team challenged the joint likelihood of Bull's correlated wins, not the validity of any scenario's operating arithmetic. The probability-weighted operating fields are arithmetic expectations. The binary P/E 15 decision still uses only the unchanged base case.

Tie-out checks

1. Reported-financial and statutory-bridge tie-out - PASS

FY2025 revenue ties: `289.456 + 19.608 = 309.064`, exactly consolidated sales. FY2025 profit ties: `126.446 + 1.212 = 127.658`, exactly statutory OI. TTM revenue ties: `308.993 + 20.438 = 329.431`. TTM profit ties: `141.624 + 0.473 = 142.097`. Corporate/unallocated and operating bridge arrays are empty in both periods. Financial income, financial expense, tax, pretax, and NI reproduce with zero residual. Sources: `statutory_bridge.json`, `data_package.md` Sections 2 and 3a. Both hashes and validator status match the durable gate.

2. NI divided by shares through listed-unit and FX bridge equals EPS - PASS

Bear: `52.39234 × 1,000 ÷ 4,356.563434 × 1.0 × 1.0 = 12.026071`. Base: `114.45486 × 1,000 ÷ 4,249.360615 × 1.0 × 1.0 = 26.934607`. Bull: `176.46546 × 1,000 ÷ 4,202.657909 × 1.0 × 1.0 = 41.989014`. Source: Sections 5 and 6 plus `quote_packet.json`. Each identity agrees within display rounding.

3. Segment sum tie-out at horizon - PASS

Bear: `256.170 + 17.252 = 273.422`; base: `353.845 + 24.791 = 378.636`; bull: `448.093 + 32.093 = 480.186`. With no corporate elimination, each combined value divided by the segment sum is exactly 100.00%. Source: Section 3 and both reviewed Section 10 segment rollups.

4. Product-to-segment rollup - PASS

Obesity/diabetes displayed components total DKK 256.171bn bear versus DKK 256.170bn unrounded, DKK 353.845bn base, and DKK 448.092bn bull versus DKK 448.093bn unrounded. Differences are DKK 0.001bn or less. Rare disease totals DKK 17.252bn bear, DKK 24.791bn base, and DKK 32.094bn displayed bull versus DKK 32.093bn unrounded. All are far inside 1%. Net pipeline revenue is included once. Sources: reviewed appendices Section 10.

5. Weighted margin check - PASS

Obesity/diabetes product profit sums are DKK 74.872bn, DKK 146.273bn, and DKK 213.666bn on the unrounded model; dividing by segment revenue gives 29.2%, 41.3%, and 47.7%. Rare product profit sums are DKK 1.170bn, DKK 4.464bn, and DKK 8.708bn; division gives 6.78%, 18.01%, and 27.13%. Product margins are analyst allocation devices on the exact common metric, not issuer-disclosed product margins. Sources: both reviewed appendices Sections 9 and 10.

6. Share count and security-unit path - PASS

Starting financial-statement diluted shares of 4,442.2 million times the split factor 1.0 equals 4,442.2 million quote-basis shares; division by the 1.0 financial-shares-per-listed-unit factor gives 4,442.2 million listed equivalents. Five annual rows then apply `start − buyback shares + SBC issuance = end`. Bear ends at 4,356.563434 million, base at 4,249.360615 million, and bull at 4,202.657909 million. No row uses ADR units. Sources: `quote_packet.json`, `quant_foundation.md` P6, and Section 6.

7. Growth plausibility - PASS

Obesity/diabetes base assumptions of 2% GLP-1 diabetes, 0% insulin, negative 8% other diabetes, 8% existing obesity, and DKK 15bn net pipeline are below relevant disclosed historical trajectories; the pipeline row is a terminal amount rather than a false CAGR. Rare disease base growth is below 1.2 times each relevant historical rate where that comparison is meaningful. The 26% other rare blood/pipeline CAGR starts from DKK 0.770bn and is below 1.2 times the 54.82% disclosed small-base history; the appendix supplies launch-stage justification. Sources: appendices Sections 6 and 8.

8. Historical arithmetic of forward rows - PASS

Examples reproduce the five-year rule: GLP-1 diabetes `143.777 × 1.02^5 = 158.741`; insulin `49.980 × 1.00^5 = 49.980`; obesity existing `87.615 × 1.08^5 = 128.735`; haemophilia B `1.354 × 1.05^5 = 1.729`; NovoSeven `7.027 × 0.96^5 = 5.730`; rare endocrine `7.158 × 1.08^5 = 10.517`. Rounded endpoint residuals are below 1%. Pipeline terminal amounts are explicitly non-CAGR rows and are added once. Sources: appendices Sections 8 and 10.

9. Recency anchor - PASS

Base first-year revenue of approximately DKK 311.585bn is 2.52% above the DKK 303.917bn modeled operating base and 5.42% below DKK 329.431bn reported TTM. Both are inside 10%. The first-year normalized OI illustration is about DKK 122.25bn, 1.38% above the recurring lower anchor of DKK 120.583bn. The larger difference from reported OI is supported by the quantified 340B reversal and identified one-off impairment treatment. Sources: data package Sections 3a, 4 and 5; obesity appendix Sections 2 and 10; rare appendix Sections 2 and 8.

10. Period and horizon integrity - PASS

TTM equals FY2025 less H1 2025 plus H1 2026 with identical 1 January to 30 June comparators. Revenue, OI, pretax, NI, capex, and shares all reproduce. No half-year is combined with an overlapping standalone quarter. Forecast endpoints state 2026-06-30 to 2031-06-30, exactly five calendar years. Every CAGR exponent is five, and FY2025 is used only for historical sanity checking.

11. Valuation, unit bridge, hashes, and probability arithmetic - PASS

The quote packet SHA-256 recomputes to `1eaf4c353ff75dad6f9e6ac4bdc6484b6faf333d1e78a20625b7e7279ecfade0`; the statutory bridge recomputes to `d0b9c1cdcfe8d679ae40ec1db084cd3ba50bead6e8b9057140d5cd35cc251610`. Listing is `XCSE:NOVO-B`, price is DKK 288.90, split/depositary/class/FX factors are each 1.0, and the packet validator passed before expiry. EPS multiplied by 15 equals the Section 7 values. Controlling probabilities sum to `30% + 60% + 10% = 100%`; the 30%/50%/20% builder priors are explicitly non-controlling. Probability-weighted EPS is DKK 23.967487. Constant-15× sensitivity wealth is DKK 420.012306 and its 7.77% CAGR is calculated from expected wealth rather than averaging scenario IRRs. The downstream locked-method cross-check is DKK 422.967706 and 7.92%, matching the red-team repair arithmetic. The base case alone controls the P/E 15 PASS with 39.85% cushion.

Synthesis conclusion

All eleven required arithmetic checks pass. The base case reaches DKK 378.636bn revenue, DKK 150.737bn statutory operating income, DKK 114.45486bn net income, and DKK 26.934607 EPS per listed B share at 30 June 2031. Required EPS for a 15× entry gate at DKK 288.90 is DKK 19.26, leaving a 39.85% cushion. Bear fails the price gate; base and bull pass. Under the controlling 30%/60%/10% weights, probability-weighted operating output is DKK 357.2268bn revenue and

DKK 135.4922bn OI. The finite constant-15× gate sensitivity produces unchanged gross local annualized returns of negative 5.21% Bear, 10.28% Base, and 19.69% Bull, plus a repaired 7.77% probability-weighted return. The downstream VP-locked 10×/15×/20× PE model produces a repaired 7.92% probability-weighted gross local IRR, 2.20 percentage points below the non-controlling original weighting. Scenario operating and return values remain unchanged; only their controlling probabilities changed.

The model’s most fragile assumptions are GLP-1 realized-price/share dynamics, the ability to absorb lower-margin oral mix without eroding group margin, and capital allocation through a high-capex cycle. Rare-disease margin recovery matters to segment quality, but has limited group EPS sensitivity at the modeled scale. No upstream file was modified, no undisclosed allocation was introduced, and no cash/debt plug was used.

SYNTHESIS CLEARED - 11/11 TIE-OUTS PASSED

Appendix CS - Compounder Score

Novo Nordisk - Compounder Score

Analysis date: 2026-09-09 **Security:** Novo Nordisk A/S B share, Nasdaq Copenhagen (`XCSE:NOVO-B`; ER2 ticker `NVO.CO`) **Price anchor:** DKK 288.90 at the completed 2026-09-09 Copenhagen session **TTM / horizon:** 2026-06-30 / 2031-06-30, exactly 5.0 years **Primary valuation method:** P/E **Preflight:** `CLEARED`, SHA-256 `f1fbe2866414c671a3340474efa4b362794781b86929b9b57f45d5289f3bd28d`

1. Executive Verdict

Compounder Score: 63/100. Business Quality Score: 57/80. 20% Return Underwriting/Stretch Score: 6/20. Score-implied classification: Reject. This is a diagnostic classification under a deliberately demanding 20% annualized-return rubric; it does not replace the ER2 Management, Moat, and P/E-15 gates.

The evidence supports a highly profitable, research-intensive pharmaceutical platform with durable manufacturing, regulatory, clinical-evidence, device, and distribution advantages. Five annual observations through FY2025 show a 59.3% median calculated ROIC, decade-long operating margins clustered around 41%-44%, low stock-based compensation, declining diluted shares, manageable leverage, and a very large unmet obesity and diabetes opportunity. Those strengths are real.

The evidence does not support dream-investment status at DKK 288.90 under the 20% rubric. The latest three-year balance-sheet-change ROIIC proxy is only 18.85%, versus a 24.14% five-year proxy, after invested capital expanded sharply for Catalent manufacturing sites, capacity, and pipeline business development. Core free-cash-flow conversion fell from more than 100% of NOPAT in FY2021-FY2023 to 72.43% in FY2024 and 58.86% in FY2025. Management and Moat are both YELLOW: the new chief executive has limited in-seat proof, incentive design omits ROIC and per-share value, Lilly is taking share with strong efficacy and oral convenience, and the post-semaglutide renewal system is not yet clinically validated.

The valuation preflight locks a P/E method, comparable normalized current EPS of DKK 21.154847, and Bear/Base/Bull exit P/Es of 10x/15x/20x. Those inputs produce unchanged gross local-currency IRRs of **-11.04% / 10.28% / 26.05%**. After accepting the red-team probability objection, controlling weights are 30%/60%/10%; probability-weighted terminal shareholder wealth is DKK 422.967706 per share and annualizes to **7.92%**. The former 30%/50%/20% distribution is non-controlling audit history. The Base case does not clear 20%, and the Bear case loses capital even after DKK 40.70 of distributions. A 20% Base return would require DKK 43.445043 terminal EPS at 15x, versus the model's DKK 26.934607, or an unsupported 24.1947x exit P/E at the modeled EPS. The Base-case 20% maximum entry price is DKK 189.37. The 20% case therefore requires a much lower purchase price, much stronger earnings, or terminal multiple expansion; this is a hard veto under the scoring rubric.

The separate conservative net-SGD diagnostic applies the same P/E bridge, 27% dividend withholding with no reclaim, 0.50% entry and 0.50% exit/conversion friction, and 1% annual DKK depreciation versus SGD. Scenario net-SGD IRRs remain **-13.25% / 8.15% / 23.98%**, while recalibrated probability-weighted net terminal wealth yields **5.84%**. That supports CIO `WATCH`, not Core Eligible: Base and probability-weighted returns do not clear the 10% mandate hurdle, and portfolio fit is unavailable. No trade, sizing, owner action, or portfolio mutation is authorized.

2. Data Source Map

All load-bearing financial and forecast inputs come from the reviewed ER2 chain. No cached warehouse dataset or new valuation input was substituted.

Evidence need	Controlling source	Period / treatment	Confidence
Price and exact security unit	`quote_packet.json`, SHA-256 `1eaf4c353ff75dad6f9e6ac4bdc6484b6faf333d1e78a20625b7e7279ecfade0`	DKK 288.90, `XCSE:NOVO-B`, 2026-09-09 close; ordinary B share, all unit factors 1.0	High
Market capitalization and enterprise-value diagnostic	Price times 4,442.2m quote-basis diluted shares; H1 2026 cash, securities, and debt from `quant_foundation.md` P6	DKK 1,283.352bn market cap; DKK 1,378.497bn approximate current EV	High for stated perimeter
Income statement and statutory tie	`quant_foundation.md`, `statutory_bridge.json`, `data_package.md`	FY2021-FY2025 plus TTM 2026-06-30; zero statutory residual	High

Evidence need	Controlling source	Period / treatment	Confidence
Balance sheet and cash flow	`quant_foundation.md` P6 and `data_package.md` sections 7-8	H1 2026 balance sheet; comparable OCF less PP&E capex FCF definition	High
Shares, SBC, repurchases, dividends	`quant_foundation.md` P6, `data_package.md` section 7, `appendix_synthesis.md` section 6	Historical diluted shares and explicit five-year scenario paths	High
Segment history and forecasts	Reviewed `appendix_B_obesity_diabetes_care.md` and `appendix_B_rare_disease.md`	Exact `Segment operating profit`; Bear/Base/Bull endpoints	Medium-High
Management and governance	`appendix_management.md`; live-fetched annual report, remuneration report, calls, and governance materials	Management gate YELLOW; CEO tenure and capital-allocation evidence	Medium-High
Moat, competition, and durability	`appendix_moat.md`; company and Lilly primary materials	Moat YELLOW; 2046 test YELLOW	Medium-High
Combined earnings model	`appendix_synthesis.md`, SHA-256 `631127eb69f706893ecbd3513f403a7a5361b35fcb392e3d14b416afbce9ea8b`	Eleven of eleven tie-outs; exact 5-year horizon; 30%/60%/10% controlling weights	High for arithmetic; Medium for forecasts
Valuation method, denominator, claims, exits	`valuation_preflight.json`	Validator-cleared and hash-bound before return calculation	High
TAM and competitor context	Primary Novo, Lilly, CMS, trial, and regulatory links preserved in the reviewed segment and moat appendices	Used qualitatively; no management TAM inserted into the model	Medium

The evidence base has four important limitations. Novo does not disclose brand-level realized net prices, rebates, unit volumes, or product margins; physical dose capacity by site and product is also unavailable. Reportable-segment cost allocations are not disclosed, so product margins in the segment models are transparent analyst allocations that roll to the exact issuer metric. A Q2 2026 text transcript was unavailable, so the official release, presentation, and workbook control that period. Finally, the verified files do not provide a complete organic-versus-acquisition reinvestment schedule; ROIIC is therefore presented as a balance-sheet-change proxy and scored conservatively.

3. Key Financial and Quality Metrics

Metric	1-year	3-year	5-year	Longer history / TTM	Interpretation
Revenue CAGR	6.43%	20.43%	19.48%	15.63% over FY2018-FY2025	Historical growth is exceptional but FY2025 slowed sharply
NOPAT CAGR	(1.69%)	18.55%	18.47%	TTM normalization required	FY2025 NOPAT stalled while the capital base expanded
Core FCF CAGR	(20.11%)	(4.00%)	n/a	4.92% over FY2021-FY2025	Cash growth materially lagged earnings during the capacity cycle
Simple ROIC	33.6%	3-year median 46.3%	5-year median 59.3%	33.6%-79.4% FY2021-FY2025	Still high, but falling as Catalent/capacity enter invested capital
Balance-sheet-change ROIIC proxy	n/a	18.85%	24.14%	Organic split unavailable	Positive and above likely cost of capital, but not a >35% clean ROIIC proof
Core FCF / NOPAT	58.86%	75.42% average	89.25% average	65.90% TTM FCF / reported NI	Multi-year conversion is credible; recent conversion is weak
Diluted share CAGR	(0.34%)	(0.72%)	(0.87%) over FY2021-FY2025	4,442.2m at H1 2026	Buybacks have more than offset employee issuance
SBC / revenue	0.46%	0.73% average	0.76% average	DKK 1.435bn FY2025	SBC is an economic cost but not a major dilution risk
SBC / core FCF	2.43%	2.49% average	2.13% average	n/a	Low relative to internally generated cash
Net debt / EBITDA	0.64x	n/a	n/a	FY2025 issuer net debt ex-leases	Manageable despite debt-funded expansion
Current normalized EV / NOPAT diagnostic	n/a	n/a	n/a	14.53x	Secondary only; EV/NOPAT is rejected as the return method
TTM core FCF yield	n/a	n/a	n/a	5.98% at DKK 288.90	Useful current cash diagnostic, not a 20% return bridge

Metric	1-year	3-year	5-year	Longer history / TTM	Interpretation
Dividend yield	n/a	n/a	n/a	4.05% using DKK 11.70	Meaningful support, subject to withholding and scenario cuts
TTM repurchase yield	n/a	n/a	n/a	0.46% using DKK 5.899bn	Flexible, but recent buybacks are modest versus history

Reported/simple FY2025 ROIC is NOPAT divided by year-end invested capital, where invested capital equals shareholders' equity plus debt less cash and short-term investments. The five-year median is 59.3%. This measure includes the reported acquired-asset balance through book equity and debt, so it is not merely a tiny legacy-capital denominator. A separate clean goodwill-excluded ROIC is not supportable because the FY2025 provider balance sheet combines goodwill and intangibles. An R&D-capitalized and lease-adjusted ROIC would require a consistent research-asset amortization schedule and lease recast not present in the sealed evidence; inventing one would create false precision. The scoring therefore recognizes the high simple ROIC but caps ROIIC and accounting-artifact points.

The five-year ROIIC proxy uses `(FY2025 NOPAT DKK 100.173bn - FY2020 NOPAT DKK 42.927939bn) / (FY2025 invested capital DKK 298.043bn - FY2020 invested capital DKK 60.924bn) = 24.14%`. The three-year proxy uses FY2022-FY2025 endpoints and equals 18.85%. These are acquisition-inclusive balance-sheet-change measures: Catalent, capacity, and acquired pipeline assets sit in the denominator. The proxy is economically useful because it captures the actual capital absorbed, but it cannot isolate organic ROIIC or time-average construction spending. The decline is a warning rather than proof that mature project returns will remain low.

4. Rubric Scorecard

Category	Score	Maximum	Evidence-led conclusion
Incremental Returns on Capital	18	25	High reported ROIC, but ROIIC proxy is 18.85%-24.14% and recent cash conversion deteriorated
Reinvestment Runway	15	20	Vast chronic-disease demand and format breadth, offset by pricing, share, and pipeline-renewal risk
Durability of Moat	10	15	Scale, evidence, manufacturing, and trust are real; pricing power and post-2032 renewal remain unproved
Accounting and Financial Quality	8	10	Zero-residual statutory bridge, low SBC, and manageable leverage; event-heavy TTM requires normalization
Capital Allocation Discipline	6	10	Strategy is coherent, but Catalent, Akero, and incentives lack demonstrated per-share return proof
Price and 20% Underwriting	6	20	Base is near 10%, weighted return is below 8%, Bear loses capital, and 20% requires a lower price or expansion
Business Quality Score	**57/80**	**80**	**Promising but incomplete dream-business evidence**
Compounder Score	**63/100**	**100**	**Reject under the 20% diagnostic rubric**

Subcategory calibration is explicit. Incremental Returns receives 5/5 for five-year median ROIC above 30%, 4/8 for the 15%-25% ROIIC proxy band, 1/3 for deterioration, 3/3 for segment unit economics, 2/3 for cash conversion, and 3/3 because returns are not solely an accounting artifact. Reinvestment Runway receives 5/5 for market opportunity, 3/5 for reinvestment at scale, 3/4 for organic opportunity, 2/3 for repeatability, 1/2 for market structure, and 1/1 because Base preserves attractive margins rather than requiring ROIC collapse.

Moat receives 4/4 for a clear integrated advantage, 1/3 for pricing power, 2/3 for competitive evidence, 1/2 for switching costs, 1/2 for stress resilience, and 1/1 for low direct AI disruption risk. Accounting and Financial Quality receives 1/2 for revenue/earnings quality, 1/2 for cash support, 2/2 for SBC and dilution, 2/2 for balance-sheet strength, 1/1 for disclosure, and 1/1 for no trust-breaking accounting issue. Capital Allocation receives 2/2 for rational reinvestment priority, 1/2 for acquisition discipline, 1/2 for buybacks, 1/2 for incentive alignment, 0/1 for owner mentality from the minority B-holder perspective, and 1/1 for historical decision evidence.

Valuation receives 2/6 because Base gross IRR is 10.28%, 1/4 because the 15x Base exit exceeds the comparable 13.656x normalized current P/E and still does not clear 20%, 0/3 because Bear is -11.04%, 0/3 because the method-matched 20% reverse hurdle is not met, 2/2 because today's normalized multiple does not itself price perfection, and 1/2 because dividends help but cannot bridge the return gap.

5. ROIIC and Reinvestment Analysis

Novo's historical value creation is not in dispute. Revenue increased from DKK 126.946bn in FY2020 to DKK 309.064bn in FY2025, and NOPAT rose from DKK 42.928bn to DKK 100.173bn. The issue is the amount and timing of capital required to sustain the next leg. Invested capital rose to DKK 298.043bn after DKK 82.163bn of Catalent-site cash in FY2024, DKK 29.973bn of FY2025 intangible/business-development purchases, and PP&E capex rising from DKK 6.335bn in FY2021 to DKK 60.140bn in FY2025. R&D also rose from 12.6% to 16.8% of revenue.

The 24.14% five-year acquisition-inclusive proxy clears an ordinary cost of capital and supports a good-business conclusion. It does not clear the rubric's >35% highest band, and the 18.85% three-year result indicates deterioration as large projects entered the denominator before full earnings contribution. Organic ROIIC cannot be separated credibly from acquired manufacturing and pipeline assets with the available segment disclosures. That missing split is economically important: a high historical group margin does not prove that the most recent DKK 100bn-plus capital cycle will earn comparable returns.

FCF conversion reinforces the caution. Core FCF was DKK 48.665bn, 66.741bn, 83.102bn, 73.804bn, and 58.962bn from FY2021 through FY2025. The five-year average FCF/NOPAT conversion is 89.25%, but the latest two years are below historical levels because PP&E capex absorbed 16.2% and 19.5% of revenue. TTM comparable core FCF recovered to DKK 76.731bn, yet management's FY2026 outlook of DKK 45bn-DKK 55bn remains lower because of timing, gross-to-net cash effects, and continued investment. The required proof is higher utilization and falling capex intensity, not facility completion alone.

6. Runway Analysis

The obesity and diabetes runway is genuinely large. Chronic disease prevalence, under-treatment, broader outcomes evidence, oral formats, higher-dose injectables, and international access can expand treated patients for many years. Novo also owns a complete commercialization system: peptide engineering, global trials, regulatory dossiers, active ingredient, fill-finish, tableting, devices, medical affairs, reimbursement, and distribution. The system excludes most entrants and can spread fixed capabilities over enormous volumes.

The Base model nevertheless grows consolidated normalized revenue only 4.49% annually to DKK 378.636bn. Diabetes GLP-1 growth is constrained by realized-price erosion and Lilly share gains; insulin is flat; existing obesity growth offsets part of the pressure; and DKK 15bn of net pipeline revenue is added only after explicit cannibalization. Rare disease grows 3.94% and depends more on margin recovery than revenue acceleration. This is a credible runway, but it is not the effortless reinvestment runway implied by Novo's prior growth-era multiple.

The Bull case requires simultaneous format, access, capacity, and pipeline success. Existing obesity revenue reaches DKK 168.695bn, diabetes GLP-1 reaches DKK 192.406bn, and net cardiometabolic pipeline launches add DKK 30bn. Rare disease requires several launches and a 27.13% margin. The red team correctly objected that the former 20% weight lacked a joint-probability bridge for these correlated wins. Bull is now weighted at 10%, with the removed ten points reassigned to Base. The Bear case remains profitable because demand and the integrated platform survive, but price and share pressure reduce revenue and capacity utilization. Runway points are therefore capped despite the enormous category TAM.

7. Moat Analysis

Novo's moat is more than a patent. The company has regulated development expertise, enormous outcomes datasets, trusted chronic-care brands, integrated peptide and device production, global payer and physician relationships, and a century of renewal. Consolidated operating margin averaged roughly 42.9% over FY2016-FY2025 and stayed within a narrow range through multiple shocks. AI can accelerate discovery and operations, but it cannot replace physical regulated doses, long trials, manufacturing qualification, safety evidence, or reimbursement access.

The moat is also penetrable. Lilly has comparable science, capital, manufacturing, and channel access; tirzepatide demonstrated stronger head-to-head weight loss, and Lilly's oral small molecule has a convenience advantage. Novo's US semaglutide compound patent expires in 2032, while the most important near-term replacement assets still require differentiated phase 3 and outcomes evidence. Novo has access power and volume elasticity, not classic price-taking power: US prices after rebates fell, management quantified 10%-15% Ozempic erosion, and adjusted gross margin declined to 78.2%

in Q2 2026. Rare disease is too small and too low-margin to diversify the metabolic profit pool today.

Accordingly, the Moat gate and 2046 test remain YELLOW. A credible 2046 Novo exists if the platform repeatedly replaces expiring molecules while preserving high-30s margins, but that future depends on a post-semaglutide generation not yet validated. Upgrade evidence would include stabilized GLP-1 share, positive price-volume elasticity, differentiated late-stage results, and normalized metabolic margin near or above 40% through lower net prices.

8. Accounting and Capital Allocation Analysis

Accounting quality is adequate for underwriting. The statutory bridge has zero residuals for FY2025 and TTM; official sources replace known provider errors in Q2 diluted EPS and capex classification. The preflight correctly removes the DKK 26.760bn 340B reversal, adds back only DKK 6.328bn of identified non-cash pipeline impairments, normalizes net financial income to a DKK 1.1bn loss, retains approximate restructuring cost, applies a 22% tax rate, and produces comparable EPS of DKK 21.154847. The raw DKK 26.194338 reported EPS and 11.029x P/E are disclosure-only because the denominator is event-heavy.

SBC is small and diluted shares declined. The balance sheet is not a near-term equity threat: FY2025 issuer net debt excluding leases was DKK 95.424bn, or 0.64x EBITDA, and H1 2026 net debt declined to DKK 86.523bn. The risk is return on capital, not solvency. FMP's goodwill/intangible presentation prevents a clean goodwill-excluded ROIC, which limits precision but does not invalidate the statutory earnings bridge.

Capital allocation is coherent but incompletely proven. Management prioritizes internal R&D and production capacity, then dividends, business development, and flexible buybacks. Buybacks fell when Catalent and capacity consumed cash, and the dividend has increased for 30 consecutive years. Against that, the Catalent sites, Akero acquisition, and Omeros license lack mature realized returns; the controller-related Catalent deal raises minority-holder scrutiny; and LTIP weights sales, operating profit, and strategic goals rather than ROIC, FCF, EPS, or relative TSR. These facts warrant partial rather than full credit.

9. 20% Return Underwriting

The preflight validator returned `VALUATION_PREFLIGHT_VALID`, all five foundations passed, and the blocker list is empty. The method is P/E in every scenario, probability weighting, reverse-return diagnostic, maximum-buy-price calculation, and net-SGD overlay. Under P/E, terminal equity value per share equals statutory diluted EPS multiplied by the locked exit P/E. No cash, debt, lease, preferred, NCI, contingent-payment, or non-operating-asset adjustment is added after that product. Dividends enter terminal wealth once. Buybacks enter only through the reconciled diluted-share path. The double-count check passes.

The red-team appendix identified the original 20% Bull probability as `MATERIAL_UNRESOLVED` because Bull combines correlated efficacy, market-share, price-volume, pipeline, margin, utilization, buyback, and valuation wins without a joint-probability bridge. This repair accepts that objection and changes only the controlling distribution from 30%/50%/20% to 30%/60%/10%, assigning the removed Bull weight to Base. The original distribution remains non-controlling audit history. This CS repair does not assert that the objection is finally resolved: the probability repair is applied and remains pending independent CSA and RT re-audit.

Measure	Bear	Base	Bull	Probability-weighted
Probability	30%	60%	10%	100%
Terminal statutory diluted EPS, DKK	12.026071	26.934607	41.989014	n/a
Locked exit P/E	10.0x	15.0x	20.0x	Same-method wealth weighting
Terminal equity value per share, DKK	120.260707	404.019111	839.780272	362.467706 expected
Cumulative distributions, DKK/share	40.700000	67.200000	79.700000	60.500000 expected
Terminal shareholder wealth, DKK/share	160.960707	471.219111	919.480272	422.967706 expected
Gross local-currency IRR	**-11.04%**	**10.28%**	**26.05%**	**7.92%**

Probability-weighted IRR is `(DKK 422.967706 / DKK 288.90)^(1/5) - 1 = 7.922484%`. It is not `30% x Bear IRR + 60% x Base IRR + 10% x Bull IRR`. Primary valuation method: P/E. For audit history only, the superseded 30%/50%/20% distribution produced DKK 467.793822 and 10.118779%; neither historical value controls any conclusion in

this repair.

All scenario bridge values are DKK billions except per-share figures and shares in millions. They show gross local-currency underwriting; conservative net-SGD adjustments follow after the three tables.

Bear-case operating and return bridge

Bear case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	DKK 303.917bn	DKK 273.422bn	-2.09%	Lilly share gains, regulated-price contagion, weak utilization, and delayed pipeline replacement outweigh volume growth
Operating margin	39.68% normalized	27.81%	-11.87 pp	Lower price, oral mix, unused capacity, and continued R&D/failed-launch cost compress margins
Operating earnings	DKK 120.583bn	DKK 76.042bn	-8.81%	Exact modeled statutory operating income from the two reviewed segment-profit rows
Diluted share count	4,442.200m	4,356.563m	-0.39%	DKK 5bn annual buybacks retire 102.637m shares; 17.0m SBC issuance is added once
EPS	DKK 21.154847 normalized	DKK 12.026071	-10.68%	Statutory diluted EPS after DKK 12bn financial expense, DKK 4bn income, and 23% tax
Valuation denominator	Comparable normalized statutory diluted EPS	Terminal statutory diluted EPS	Comparable	Raw TTM EPS is disclosure-only; normalized and terminal perimeters are aligned
Valuation	13.656x normalized P/E	10.000x P/E	-3.656x	Bottom of the locked 10x-14x range for a profitable but structurally impaired franchise
Share value	DKK 288.90	DKK 120.260707	-16.08%	DKK 12.026071 EPS times 10x; no net-cash/debt adjustment
Annual dividend	DKK 11.70	DKK 5.00	-15.64%	Earnings and cash conversion weaken; explicit annual path permits a cut
Dividend yield	4.05%	4.16%	+0.11 pp	Annual dividend divided by endpoint share value
Five-year dividends	-	DKK 40.70	cumulative	DKK 11.70, 10.00, 8.00, 6.00, and 5.00, counted once
Total ending value	DKK 288.90	DKK 160.960707	**-11.04% gross local IRR**	DKK 120.260707 share value plus DKK 40.70 distributions

Base-case operating and return bridge

Base case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	DKK 303.917bn	DKK 378.636bn	4.49%	Obesity volume, oral adoption, and access offset net-price pressure while Rare disease recovers gradually
Operating margin	39.68% normalized	39.81%	+0.13 pp	Volume leverage offsets price, oral mix, R&D, launch spending, and capacity depreciation
Operating earnings	DKK 120.583bn	DKK 150.737bn	4.57%	Exact modeled statutory operating income from the two reviewed segment-profit rows
Diluted share count	4,442.200m	4,249.361m	-0.88%	DKK 10/12/15/18/20bn buybacks retire 209.839m shares; 17.0m issuance is added once
EPS	DKK 21.154847 normalized	DKK 26.934607	4.95%	Statutory diluted EPS after DKK 9bn expense, DKK 5bn income, and 22% tax

Base case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Valuation denominator	Comparable normalized statutory diluted EPS	Terminal statutory diluted EPS	Comparable	The preflight aligns one-off, below-line, currency, and listed-unit treatments
Valuation	13.656x normalized P/E	15.000x P/E	+1.344x	Locked central multiple near the de-rated current/FY2025 trough, below the prior growth-era band
Share value	DKK 288.90	DKK 404.019111	6.94%	DKK 26.934607 EPS times 15x; no net-cash/debt adjustment
Annual dividend	DKK 11.70	DKK 16.00	6.46%	Gradual dividend growth resumes as earnings and conversion normalize
Dividend yield	4.05%	3.96%	-0.09 pp	Annual dividend divided by endpoint share value
Five-year dividends	-	DKK 67.20	cumulative	DKK 11.70, 12.00, 13.00, 14.50, and 16.00, counted once
Total ending value	DKK 288.90	DKK 471.219111	**10.28% gross local IRR**	DKK 404.019111 share value plus DKK 67.20 distributions

Bull-case operating and return bridge

Bull case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	DKK 303.917bn	DKK 480.186bn	9.58%	Injectable strength, oral access, high capacity utilization, and several pipeline wins renew growth
Operating margin	39.68% normalized	46.31%	+6.63 pp	Strong mix and utilization more than offset continuing R&D and launch cost
Operating earnings	DKK 120.583bn	DKK 222.374bn	13.02%	Exact modeled statutory operating income from the two reviewed segment-profit rows
Diluted share count	4,442.200m	4,202.658m	-1.10%	DKK 15/20/25/30/35bn buybacks retire 256.542m shares; 17.0m issuance is added once
EPS	DKK 21.154847 normalized	DKK 41.989014	14.70%	Statutory diluted EPS after DKK 6bn expense, DKK 7bn income, and 21% tax
Valuation denominator	Comparable normalized statutory diluted EPS	Terminal statutory diluted EPS	Comparable	Same statutory diluted, DKK, Copenhagen B-share denominator
Valuation	13.656x normalized P/E	20.000x P/E	+6.344x	Locked 20x recognizes renewed growth but remains below the FY2021-FY2024 27.5x-38.3x regime
Share value	DKK 288.90	DKK 839.780272	23.79%	DKK 41.989014 EPS times 20x; no net-cash/debt adjustment
Annual dividend	DKK 11.70	DKK 22.00	13.46%	Faster growth is allowed only with higher earnings and FCF
Dividend yield	4.05%	2.62%	-1.43 pp	Annual dividend divided by endpoint share value
Five-year dividends	-	DKK 79.70	cumulative	DKK 11.70, 13.00, 15.00, 18.00, and 22.00, counted once
Total ending value	DKK 288.90	DKK 919.480272	**26.05% gross local IRR**	DKK 839.780272 share value plus DKK 79.70 distributions

CIO actionability

Measure	Result	Notes
Status	WATCH	Quality is credible, but Base is 8.15%, weighted net-SGD is 5.84%, and downside is material
Bear / Base / Bull net SGD IRR	**-13.25% / 8.15% / 23.98%**	Same P/E wealth bridge after conservative costs, withholding, and FX translation
Probability-weighted net SGD IRR	**5.84%**	CAGR of 30%/60%/10% probability-weighted net terminal wealth
10% mandate hurdle	FAIL	Base and probability-weighted cases must both clear; neither does
15% stretch hurdle	FAIL	Base and probability-weighted diagnostics remain below 15%
Downside and portfolio fit	UNAVAILABLE	Bear security downside is adverse; actual holdings, factor exposure, and risk budget were not supplied
Proposed sizing ceiling	none	No sizing authority or portfolio context; owner approval would be required

The net-SGD diagnostic assumes DKK depreciates 1.00% annually against SGD; 0.50% all-in entry friction; 0.50% exit/conversion friction on terminal value and dividends; and 27% dividend withholding with no reclaim. No Singapore capital-gains tax is modeled for an investment account, but investor tax status is unknown. Each annual dividend is translated at its year-specific `0.99^t` FX factor. Entry cost basis is `DKK 288.90 x 1.005`; terminal share value is multiplied by `0.99^5 x 0.995`; each dividend is multiplied by `0.73 x 0.99^t x 0.995`. The unchanged scenario net terminal wealth equivalents are DKK 142.605516, DKK 429.584316, and DKK 850.624831; the repaired 30%/60%/10% weighted value is DKK 385.594727. Its five-year CAGR from the cost-adjusted entry basis is **5.84%**. These are diagnostics, not promises or trade instructions.

Trade execution authorized: NO. Portfolio mutation authorized: NO. Owner action authorized: NO.

Reverse-return and maximum-buy-price diagnostic

At a 20% annual return, required terminal shareholder wealth is `DKK 288.90 x 1.20^5 = DKK 718.875648`. Using the locked Base 15x P/E and DKK 67.20 distributions, required terminal equity value is DKK 651.675648 and required EPS is DKK 43.445043. That requires 15.48% annual EPS growth from normalized DKK 21.154847, versus 4.95% in Base. Alternatively, holding modeled Base EPS fixed requires a 24.1947x terminal P/E, well above the locked 15x and comparable current 13.656x. The maximum Base-case price for a 20% gross local IRR remains DKK 189.37; the repaired probability-weighted maximum price is DKK 169.98.

The preflight's excessive-optimism test passes because the 20x Bull exit remains below the 27.5x-38.3x FY2021-FY2024 growth-era band and requires explicit high-growth operating evidence. Its excessive-bearishness test passes because the 10x Bear exit retains value for positive EPS, chronic demand, and the integrated platform rather than imposing a liquidation multiple. These tests validate the locked valuation construction; they do not make the Base 20% hurdle work.

10. Hard Veto Checklist

Test	Result	Evidence and implication
ROIIC below cost of capital with no improvement path	PASS	18.85%-24.14% proxy remains above a reasonable cost of capital, though below the top rubric bands
ROIC high only because capital is tiny or negative	PASS	FY2025 invested capital is DKK 298.043bn and includes recent debt/equity-funded expansion
Growth requires persistent external financing	WATCH	Debt funded a major expansion, but 0.64x FY2025 net debt/EBITDA and internal cash generation remain manageable
Share count rises without per-share value	PASS	Diluted shares declined; the forward model includes 17.0m of issuance explicitly
Routine large acquisitions without return disclosure	WATCH	Catalent and Akero returns remain unproved, but the evidence does not show a long serial-acquirer pattern
FCF structurally lags earnings	WATCH	Recent conversion is weak during the build; a permanent structural shortfall is not yet demonstrated
Concentration, regulation, competition, or leverage can impair equity	WATCH	Metabolic concentration, Lilly, and payer power are material; leverage alone is not existential

Test	Result	Evidence and implication
20% case requires multiple expansion	**FAIL - HARD VETO**	Modeled Base needs 24.1947x rather than locked 15x to reach 20% at today's price
Flawless execution is needed at today's price	**FAIL - HARD VETO**	Base delivers 10.28%; the 20% result requires Bull-like EPS and valuation together
Moat cannot be explained clearly	PASS	Integrated science, evidence, manufacturing, devices, and access are specific and observable
Accounting or governance impairs trust	WATCH	Foundation control and related-party Catalent need scrutiny; controls and statutory reconciliation are clean
Balance-sheet risk can wipe out equity	PASS	Positive earnings, 0.64x net debt/EBITDA, and no preferred/NCI claim support resilience

11. Final Decision

Score-implied classification: Reject. Novo Nordisk remains a high-quality business, but the evidence does not support a 20% annualized shareholder return at DKK 288.90 without a materially better operating outcome, a large exit-multiple expansion, or a roughly one-third lower entry price. The 63/100 score sits below the rubric's 70-point boundary, Business Quality is below the 65/80 dream-business threshold, the ROIIC-plus-runway subtotal is 33/45 rather than 35/45, the valuation score is 6/20 rather than 15/20, and two hard vetoes are present.

The most important positive evidence is the 59.3% five-year median calculated ROIC, persistent group margin, large unmet chronic-disease demand, low SBC, and a share count that has declined. The most important negative evidence is slowing incremental return, capital-intensive expansion, declining recent cash conversion, Lilly's direct competitive success, payer price pressure, Management/Moat/2046 YELLOW gates, the gap between Base EPS and the 20% reverse hurdle, and the accepted red-team finding that the former Bull probability overstated the joint likelihood of correlated favorable events.

Monitoring should focus on four numerical tests: normalized Obesity and Diabetes care margin remaining near or above 40%; GLP-1 share stabilizing while realized-price pressure is offset by volume; capex declining while core FCF conversion recovers above roughly 75%; and late-stage post-semaglutide assets producing differentiated clinical and outcomes evidence. A Base-underwriting purchase becomes mathematically compatible with the 20% gross hurdle around DKK 189.37, while the recalibrated probability-weighted trigger is DKK 169.98, subject to a fresh price packet, unchanged earnings and valuation evidence, and a rerun of the full ER2 gates. This is a research trigger, not an order.

Compounder Score note: **63/100** means the evidence does not support dream-investment status under the 20% rubric; valuation and unresolved durability cap the result. Business Quality Score note: **57/80** means a promising but incomplete compounder, with high historic returns offset by slowing ROIIC and Management/Moat YELLOW evidence. 20% Return UW Score note: **6/20** means today's price does not support the 20% stretch hurdle; Base gross return is 10.28% and recalibrated probability-weighted gross return is 7.92%.

12. Machine-Readable JSON

The complete structured record is written separately to `compounder_score.json`. It binds the replacement preflight and synthesis hashes, reproduces the locked P/E method and 10x/15x/20x exits, preserves full-precision scenario and repaired 30%/60%/10% probability-weighted gross and net-SGD arithmetic, records the accepted red-team probability objection as a repair pending re-audit, records category and threshold tests, and sets every authorization field to `false`.

Appendix CSA - Scoring Audit

Novo Nordisk - Scoring Audit

Audit date: 2026-09-09 **Security:** XCSE:NOVO-B ordinary B share **Current price:** DKK 288.90 on 2026-09-09 **Audit status: REPAIRED AND AUDITED; PENDING RT CONFIRMATION Scope:** independent re-audit of the repaired valuation preflight, CompounderScorer evidence, score construction, 30%/60%/10% probability weighting, gross local-currency returns, and net-SGD diagnostic. This audit authorizes no trade, sizing, owner action, or portfolio mutation.

1. Original vs Audited Scores

The repaired hash chain reproduces exactly. `appendix_synthesis.md` hashes to `631127eb69f706893ecbd3513f403a7a5361b35fcb392e3d14b416afbce9ea8b`; `valuation_preflight.json` hashes to `f1fbe2866414c671a3340474efa4b362794781b86929b9b57f45d5289f3bd28d`; `appendix_compounder_score.md` hashes to `043f42d6347f37c72eb423e3cb78cca4516bbbc9f142c3ae4d68c85733bfa4b4`; and `compounder_score.json` hashes to `0c4764e4dc479416fca42df031c8b92d52ac2586dba217a65994d33d06d00383`. The preflight validator, run with `--check-evidence-files` and the expected repaired hash, returned `VALUATION_PREFLIGHT_VALID`. Every VP-bound evidence hash reproduces, including the repaired synthesis plus the unchanged quote packet, statutory bridge, data package, reviewed segments, quantitative foundation, valuation-history file, and annual/interim capital-structure evidence.

VP remains semantically cleared: status is `CLEARED`, all five foundations pass, the blocker list is empty, and the primary method is `PE`. CS copies the normalized anchor, method, denominator, capital-structure treatment, diluted-share paths, and 10x/15x/20x exits exactly. The only repaired return input is the probability distribution: Bear 30%, Base 60%, Bull 10%. The former 30%/50%/20% distribution is clearly preserved as non-controlling audit history.

The prior score reductions remain justified because the repair did not add an R&D-capitalized and lease-adjusted ROIC schedule or a cumulative-reinvestment ROIIC ledger.

Item	CS score	Audited score	Notes
Business Quality Score / 80	57/80	54/80	Reduce 1A by one point and 1B by two points
Valuation / 20% Return UW Score / 20	6/20	6/20	Repaired weighting lowers PW returns but not any rubric band
Compounder Score / 100	63/100	60/100	Remains below the 70-point Reject boundary
Classification	Reject	Reject	Two valuation hard vetoes remain

The CSA stage is complete, but final return publication is not yet cleared. The original red team classified the Bull-probability calibration as `MATERIAL_UNRESOLVED`. CS has applied the requested repair, and CSA has validated it, but only the required RT rerun can confirm that the objection is resolved. Accordingly, this audit labels the condition **REPAIRED_PENDING_RT_CONFIRMATION**, not resolved.

2. Score Reductions and Reasons

Category 1A remains reduced from 5/5 to 4/5. The reported/simple five-observation ROIC series is calculated and source-bound: 59.3%, 70.2%, 79.4%, 46.3%, and 33.6% from FY2021 through FY2025, with a 59.3% median. However, the rubric asks for normalized/adjusted ROIC, while CS explicitly states that a consistent R&D-capitalized and lease-adjusted schedule is unavailable. FY2025 R&D was DKK 52.039bn, 16.8% of revenue, so the adjustment is material rather than cosmetic. The evidence supports a high-return franchise but not the highest adjusted-ROIC band at the claimed precision.

Category 1B remains reduced from 4/8 to 2/8. CS calculates arithmetically correct three- and five-year balance-sheet-change proxies of 18.85% and 24.14%. Their endpoint capital base captures Catalent sites, manufacturing capacity, and acquired pipeline assets. Yet this denominator is change in invested capital, not the rubric's required cumulative reinvestment schedule of net capex, working capital, capitalized R&D, justified growth opex, acquisitions, and disposals. Organic ROIIC and acquisition-inclusive ROIIC cannot be separated cleanly. The proxy is useful, but it is only partly supported as a rubric-grade ROIIC measure.

No probability-related score reduction is added. Category 6 already awards just 6/20: Base IRR earns 2/6, mild exit-multiple expansion earns 1/4, Bear earns 0/3, reverse-return feasibility earns 0/3, starting valuation earns 2/2, and cash returns earn 1/2. Moving the controlling PW gross return from 10.12% to 7.92% does not change those subcategory outcomes because 6A is explicitly the Base-case test and Base remains 10.28%. The overall Reject classification is unchanged.

Subcategory	Evidence status	CS	Audited	Audit conclusion
1A Normalized ROIC	Partly supported	5	4	Simple ROIC is high; adjusted R&D/lease schedule is missing
1B ROIIC	Partly supported	4	2	Endpoint proxy is correct but not cumulative-reinvestment ROIIC
1C ROIIC trend	Supported	1	1	Three-year proxy is below five-year proxy
1D Unit economics	Supported	3	3	Exact segment profit and durable margin evidence support returns
1E Cash conversion	Supported	2	2	Five-year average is strong; latest two years are weak
1F Accounting artifact	Supported with limitation	3	3	Cash and acquired-capital burden corroborate returns
2A Market opportunity	Supported	5	5	Chronic-disease penetration and demand are source-bound
2B Reinvest at scale	Partly supported	3	3	Historical proof exists; latest capacity cycle is unproved
2C Organic opportunity	Partly supported	3	3	Product runway exists; realized net-price data are missing
2D Repeatability	Partly supported	2	2	Platform history is long; renewal assets remain clinical
2E Market structure	Supported	1	1	Barriers are high, but Lilly is an equally scaled attacker
2F ROIC collapse	Supported	1	1	Base preserves margin without historical growth assumptions
3A Source of advantage	Supported	4	4	Science, trials, devices, manufacturing and access are observable
3B Pricing power	Supported	1	1	Evidence shows price pressure, so the low score is correct
3C Competitive evidence	Supported	2	2	Historic strength is offset by Lilly efficacy and share gains
3D Customer stickiness	Supported	1	1	Clinical friction exists, but payer switching is real
3E Stress resilience	Supported	1	1	Margins persisted while current gross margin and share weakened
3F Disruption risk	Supported	1	1	AI cannot replace regulated physical medicine production
4A Earnings quality	Supported	1	1	Event-heavy TTM is explicitly normalized
4B Cash support	Supported	1	1	Multi-year conversion is credible; recent conversion is weak
4C SBC/dilution	Supported	2	2	SBC is expensed and explicit issuance is modeled
4D Balance sheet	Supported	2	2	FY2025 net debt/EBITDA is 0.64x
4E Disclosure	Supported with gaps	1	1	Statutory disclosure is strong; commercial detail is limited
4F Accounting trust	Supported	1	1	No trust-breaking issue identified

Subcategory	Evidence status	CS	Audited	Audit conclusion
5A Reinvestment priority	Supported	2	2	R&D/capacity priority is coherent, though returns are unproved
5B Acquisitions	Partly supported	1	1	Catalent/Akero outcomes remain unproved
5C Buybacks	Supported	1	1	Buybacks flexed down during heavy investment
5D Incentives	Supported	1	1	Incentives omit ROIC, FCF and per-share metrics
5E Owner mentality	Supported	0	0	Foundation control constrains minority-holder proof
5F Past decisions	Partly supported	1	1	Long history is positive; recent large cycle remains open
6A Base IRR	Supported	2	2	10.28% falls in the 10%-15% band
6B Exit multiple	Supported	1	1	Mild expansion from 13.656x to 15x does not clear 20%
6C Bear return	Supported	0	0	-11.04% is unacceptable
6D Reverse hurdle	Supported	0	0	Required EPS or multiple is far above Base
6E Price perfection	Supported	2	2	13.656x normalized current P/E is not perfection pricing
6F Cash returns	Supported	1	1	Dividends help but cannot close the return gap

3. Unsupported Claims

The claim that Novo has demonstrated a **59.3% five-year median adjusted ROIC** remains unsupported as written. What is demonstrated is a five-observation simple ROIC median using NOPAT divided by year-end equity plus debt less cash and short-term investments. CS discloses the limitation but still awards the maximum subscore.

The claim that **24.14% is a complete acquisition-inclusive five-year ROIIC under the rubric formula** also remains too strong. It is a balance-sheet-change proxy. It captures much of the recent capital burden but cannot isolate timing, amortization, write-downs, FX, working-capital flows, or organic versus acquired reinvestment. The repair changes no evidence here.

The repaired probability weights are not presented as independently proven joint probabilities. They are an explicit acceptance of the red-team objection: Bull is reduced from 20% to 10% and the ten points are assigned to Base. CSA can validate the arithmetic and direction of that repair, but it cannot assert final resolution before the red team reruns. CS correctly sets `resolved_by_assertion=false`.

Other material claims remain supported or qualified: the decade-long operating-margin range, low SBC burden, declining diluted shares, manageable leverage, Lilly share pressure, weak classic pricing power, and Management/Moat/2046 YELLOW conclusions all trace to the ER2 evidence chain.

4. Calculation Errors

The repaired valuation and return calculations do not break. The only residual labeling error is historical: `share_count_cagr_5yr = -0.8667%` is calculated from FY2021 to FY2025, which contains four annual intervals despite five observations. The value is the correct four-year CAGR and does not change the dilution conclusion because forward SBC issuance is modeled explicitly.

Check	Independent replay	Result
Reported TTM EPS	DKK 116.443bn / 4,445.35m = DKK 26.194338	Exact
Reported current P/E	DKK 288.90 / DKK 26.194338 = 11.029101x	Exact; disclosure-only
Normalized TTM net income	(DKK 121.665bn - DKK 1.100bn) x 78% = DKK 94.0407bn	Exact
Normalized TTM EPS	DKK 94.0407bn / 4,445.35m = DKK 21.154847	Exact

Check	Independent replay	Result
Normalized current P/E	DKK 288.90 / DKK 21.154847 = 13.656445x	Exact and comparable
Bear wealth	DKK 12.026071 x 10 + DKK 40.70 = DKK 160.960707	Exact
Base wealth	DKK 26.934607 x 15 + DKK 67.20 = DKK 471.219111	Exact
Bull wealth	DKK 41.989014 x 20 + DKK 79.70 = DKK 919.480272	Exact
Repaired PW wealth	30% x Bear + 60% x Base + 10% x Bull = DKK 422.967706	Exact
Repaired PW gross IRR	`(422.967706 / 288.90)^(1/5) - 1` = 7.922484%	Exact; not average IRRs

The scenario-specific gross local-currency IRRs remain Bear **-11.040063%**, Base **10.279572%**, and Bull **26.054680%**. The repaired probability-weighted gross IRR is **7.922484%**. The arithmetic average under 30%/60%/10% would be 5.461192%, proving that CS correctly annualizes weighted terminal wealth. The repair lowers controlling gross PW IRR by 2.196295 percentage points from the non-controlling 10.118779% history.

The P/E claim perimeter is unchanged and clean. No cash, debt, lease, preferred, NCI, contingent obligation, or non-operating asset is added after EPS times P/E. Dividends enter shareholder wealth once. Buybacks enter only through diluted shares, while 3.4m annual SBC issuance is added once. Terminal shares of 4,356.563434m, 4,249.360615m, and 4,202.657909m reconcile to the synthesis paths.

The net-SGD overlay also replays exactly from the same P/E terminal values. Net scenario wealth remains DKK-equivalent 142.605516, 429.584316, and 850.624831. Applying 30%/60%/10% yields DKK-equivalent **385.594727**. Against the cost-adjusted entry basis of `288.90 x 1.005`, its five-year CAGR is **5.838456%**. Scenario net-SGD IRRs remain Bear **-13.254981%**, Base **8.150109%**, and Bull **23.983785%**. The repaired PW net-SGD return is 2.216547 percentage points below the superseded 8.055003% result.

The reverse-return bridge remains exact. A 20% Base return requires DKK 718.875648 of terminal wealth, DKK 43.445043 terminal EPS at 15x, or a 24.194733x exit P/E on modeled Base EPS. Maximum entry price is DKK 189.372392 for Base wealth. The repaired probability-weighted maximum price is DKK **169.981235**, down from the superseded DKK 187.995845.

5. Missing Data

The central score gaps remain a consistent R&D-capitalization and lease-adjusted ROIC schedule, a cumulative-reinvestment ledger suitable for the prescribed ROIIC formula, and an organic-versus-acquisition ROIIC split. Brand-level realized net price, rebates, unit volume, product margins, and physical dose capacity are also unavailable. These gaps constrain score precision but do not invalidate the statutory EPS or P/E return bridge.

The probability repair still lacks a product-by-product joint-probability calculation or reference-class frequency for the Bull stack. That is why the original red-team objection cannot be marked resolved yet. Portfolio holdings, factor exposure, liquidity budget, tax status, and risk budget also remain unavailable; these limit portfolio fit and sizing, not the finite security-level returns.

6. Hard-Veto and Threshold Test Audit

Test	Audited result	Reason
Compounder Score at least 80/100	Fail	60/100 audited
Business Quality at least 65/80	Fail	54/80 audited
Valuation score at least 15/20	Fail	6/20 audited
ROIIC plus runway at least 35/45	Fail	30/45 audited after evidence caps
Base gross IRR at least 20%	Fail	10.28%
PW gross IRR at least 20%	Fail	7.92%
PW net-SGD IRR at least 10%	Fail	5.84%
PW net-SGD IRR at least 8%	Fail	5.84%
Bear gross IRR at least 8%-10%	Fail	-11.04%
No hard vetoes	Fail	Two valuation vetoes remain
No required multiple expansion	Fail	Base is 15x versus 13.656x; 20% needs 24.195x

The corrected ROIIC-plus-runway subtotal is 15/25 plus 15/20, or **30/45**. The original CS threshold was already false at 33/45 and remains false. The two hard vetoes remain: 20% requires materially higher earnings or terminal multiple expansion, and it requires Bull-like operating and valuation success rather than the Base case.

The CIO `WATCH` status is consistent with the actionability matrix: Base net-SGD IRR is 8.15%, not below the 8% automatic PASS boundary, while Management and Moat remain YELLOW, PW net-SGD is 5.84%, downside is material, and portfolio fit is unavailable. It is not Core Eligible or Experimental. Sizing ceiling remains null and proposed sizing remains none.

7. Final 20% Hurdle Pass/Fail

FAIL. Base gross local-currency IRR is 10.28% and repaired PW gross is 7.92%. Base net-SGD is 8.15% and repaired PW net-SGD is 5.84%. Neither the 20% diagnostic hurdle nor the CIO 10% Base-and-weighted net-SGD condition clears.

8. Dream Business / Dream Investment Classification

Neither under the strict rubric. Novo Nordisk is a highly profitable and advantaged pharmaceutical company, but audited Business Quality of 54/80 is below the 65/80 dream-business threshold because adjusted ROIC/ROIIC proof, current management execution, pricing power, and post-semaglutide durability remain incomplete. It is not a dream investment at DKK 288.90 because Base and repaired weighted returns fall far short of 20%.

The exit-multiple economic-coherence audit continues to pass. Normalized current 13.656x P/E is the comparator; raw 11.029x is disclosure-only and not a cap. Bear 10x remains adverse but values positive surviving EPS. Base 15x is mild expansion and is scored down. Bull 20x requires 14.70% EPS CAGR, 46.31% margin, pipeline wins, high capacity utilization, and aggressive capital returns. Reducing Bull probability to 10% directly addresses the excessive-optimism objection without changing VP-locked exits or scenario economics. The excessive-bearishness test also passes because Bear is not a disguised liquidation. Final red-team confirmation remains mandatory.

9. Stage 7 Scorecard Notes

- **Compounder Score note:** 60/100 means Novo does not qualify as a dream investment under the 20% rubric; adjusted return-on-capital proof and valuation cap the score.
- **Business Quality Score note:** 54/80 means the franchise is profitable and advantaged, but clean adjusted ROIC/ROIIC, pricing power, management execution, and long-duration renewal remain unproved.
- **20% Return UW Score note:** 6/20 means Base gross return is 10.28% and repaired probability-weighted gross return is 7.92%; the 20% hurdle fails decisively.

10. Auditor JSON

The companion `compounder_score_audit.json` records the repaired hashes, audited scores, full-precision scenario and 30%/60%/10% weighted gross/net returns, preflight evidence validation, P/E consistency, exit-multiple integrity, authorization flags, threshold outcomes, score reductions, and the required `REPAIRED_PENDING_RT_CONFIRMATION` status. Confidence is **Medium**: valuation and return arithmetic are high-confidence, while adjusted ROIC/ROIIC and the independent joint-probability evidence remain incomplete.

Appendix RT - Red Team

Novo Nordisk - Production Red Team: Probability-Repair Review

Security: XCSE:NOVO-B ordinary B share **Price anchor:** DKK 288.90 on 9 September 2026 **Forecast anchor and horizon:** TTM ended 30 June 2026 to 30 June 2031, exactly five years **Primary valuation method:** P/E **Conclusion: The prior material probability objection is resolved.** The repaired 30% Bear / 60% Base / 10% Bull distribution is controlling everywhere, the former 30% / 50% / 20% distribution is non-controlling audit history, and no separate supportable correction has been identified that crosses the ER2 materiality threshold.

Audit-integrity check before the renewed attack

All six root-supplied hashes reproduce exactly. `appendix_synthesis.md` hashes to `631127eb69f706893ecbd3513f403a7a5361b35fcb392e3d14b416afbce9ea8b`; `valuation_preflight.json` to `f1fbe2866414c671a3340474efa4b362794781b86929b9b57f45d5289f3bd28d`; `appendix_compounder_score.md` to `043f42d6347f37c72eb423e3cb78cca4516bbbc9f142c3ae4d68c85733bfa4b4`; `compounder_score.json` to `0c4764e4dc479416fca42df031c8b92d52ac2586dba217a65994d33d06d00383`; `appendix_scoring_audit.md` to `0c231cd701c6cd7c4dd078160e4c6c7c9d0c03863a83dac323b6cbce22804766`; and `compounder_score_audit.json` to `63f601fa412cb03f1e5f7379518bf8ca23c30a1474042abfb8408ca170ba2021`. The repaired VP validator, run against its expected hash with evidence-file checking, returned `VALUATION_PREFLIGHT_VALID`. VP remains `CLEARED`, with five of five foundations passed and no blockers.

The P/E method, normalized DKK 21.154847 current EPS, 13.656445x normalized current P/E, 10x/15x/20x exits, share paths and zero post-P/E capital-structure adjustments remain unchanged and match across VP, CS and CSA. Scenario wealth and returns also remain unchanged. The only controlling return input changed is probability.

Independent replay confirms DKK 160.960707 Bear wealth, DKK 471.219111 Base wealth and DKK 919.480272 Bull wealth. Applying 30% / 60% / 10% gives DKK 422.967706: `(422.967706 / 288.90)^(1/5) - 1 = 7.922484%`. Net-SGD scenario wealth of DKK-equivalent 142.605516, 429.584316 and 850.624831 weights to DKK-equivalent 385.594727; against the cost-adjusted DKK 290.3445 entry basis, the five-year CAGR is 5.838456%. No averaging of IRRs, method switch, distribution double count or claim-perimeter plug was found.

1. The most fragile assumption

The most fragile operating assumption remains **8.0% five-year revenue CAGR for existing obesity care**, taking the normalized therapy line to DKK 128.735bn by June 2031. Base assumes roughly 15% volume growth and negative 6.1% price/mix. That combination requires access elasticity, oral adoption and international launches to outrun Lilly's efficacy, convenience, capacity and payer attack while the lower-margin pill cannibalizes part of the injectable franchise.

The competitive asymmetry remains stark. Novo's Q2 update showed adjusted sales up 7% at CER and rapid Wegovy-pill adoption, but Lilly's Q2 revenue rose 48%, driven by 60% volume growth against a 13% realized-price decline; Mounjaro rose 91% and Zepbound 46%. Lilly is demonstrating that it can accept price pressure while scaling faster than Novo. [Novo Q2 2026 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590); [Lilly Q2 2026 release](https://investor.lilly.com/news-releases/news-release-details/lilly-reports-second-quarter-2026-financial-results-raises-full).

The synthesis's exact sensitivity is still the right translation. A 200-basis-point miss in the large segment's equivalent CAGR reduces Base EPS from DKK 26.934607 to DKK 24.430923. At the unchanged 15x P/E and DKK 67.20 distributions, Base wealth falls to DKK 433.663845 and IRR to 8.46%, 1.82 points below audited Base. That is close to material but does not cross the two-point rule. Combining the growth miss with a two-point metabolic-margin miss would reduce Base IRR to about 7.56%, but that is a stacked downside migration already represented by the 30% Bear scenario, not an evidenced correction to one audited Base input.

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

The most likely optimistic Stage 5 number is **Base 2031 consolidated operating margin of 39.81%**, or DKK 150.737bn operating income. The decade-long 41%-44% range makes it look modest, but the current business mix is less favorable: Q2 2026 adjusted gross margin was 78.2% versus 84.7% in FY2024; the Wegovy pill earns a lower gross margin than the injectable; realized price is under pressure; the capacity build raises depreciation; and management expects R&D intensity to remain high.

The stress is concentrated in Obesity and Diabetes care. A two-point miss in its terminal margin removes about DKK 7.1bn of operating income, approximately DKK 5.5bn after tax, or roughly DKK 1.30 per share. Holding everything else constant, that reduces Base IRR by about 0.9 point. Rare disease cannot offset a metabolic miss at its modeled scale: a two-point Rare disease margin change moves group EPS by only about DKK 0.091. Base margin therefore remains the operating number to challenge, but the quantified single-input correction is below the materiality threshold.

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

Novo may be losing both efficacy leadership and payer scarcity, the privileges that supported its prior margin regime. Lilly can use better injectable efficacy, easier oral dosing, expanding capacity and payer concessions to take branded share while both manufacturers reset net prices. Within six to eight quarters, diabetes GLP-1 can contract, obesity growth can fail to absorb new depreciation and R&D, and Rare disease can remain too small to diversify the profit pool; group margin then settles in the mid-30s rather than recovering toward 40%. The validating signal is two consecutive quarters in which adjusted metabolic sales growth trails treated-volume growth by at least ten percentage points while adjusted metabolic operating margin falls below 37%.

4. Cross-examination of management commentary

“The increased US GLP-1 momentum… has led us to further raise our 2026 guidance.” The increase is real, but the revised adjusted sales and operating-profit range remains 0% to negative 6%. Improvement from a deliberately reset base is not evidence of a five-year share recovery. The first contradiction would be adjusted CER sales excluding rebate true-ups falling below zero while branded prescriptions continue to expand. [Novo Q2 2026 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590).

“Price reduction… is our investment for the future and for capturing more patients.” This is a strategy rather than proof of value creation. The Base model requires incremental patients to offset lower revenue per patient, pill mix, commercial costs and new depreciation. Failure appears first when treated-volume growth exceeds adjusted revenue growth by ten points for two quarters without a sequential adjusted-gross-margin recovery.

“Rare disease is now positioned for sustained growth.” TTM Segment operating margin is 2.31%, while Base requires DKK 4.464bn of profit and an 18.01% margin by 2031. Submissions and trial milestones do not prove reimbursement, switching or contribution margin. The first contradiction would be failure to sustain a segment margin above 10% by the end of 2027 or launch revenue arriving without positive operating leverage.

5. Stage 5 tie-out reverification

The recency anchor still ties. TTM uses FY2025 less H1 2025 plus H1 2026 for revenue, operating income, pretax income, net income and capex. The half-years are like-for-like and do not overlap. The DKK 26.760bn 340B reversal is removed from the comparable anchor; pipeline impairments and normalized financial items are separately identified. The model begins from a volatile trend-Q1 adjusted sales down 4% and Q2 up 7%-but it does not hide the volatility in reported TTM growth.

The share-count bridge remains correct. Base dividends plus terminal-year buybacks exceed the terminal FCF diagnostic by about DKK 7.9bn, but buybacks are explicitly flexible. Removing all Base repurchases raises terminal shares to about 4,459.2m, lowers terminal EPS to DKK 25.67 and reduces Base gross IRR from 10.28% to 9.37%, a 0.90-point effect. This remains **IMMATERIAL** and does not expose a distribution double count.

No product CAGR lacks a named structural rationale. Existing obesity Base growth is supported by pill adoption, access and international expansion; Rare disease Base recovery is tied to identified launches and historical margins. The attack is that those rationales may fail, not that the model fabricated them. That distinction matters: a supportable Bear case is not automatically a correction to Base.

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

The audited score says the 20% return case fails, and the red team agrees. A 20% Base return requires DKK 718.875648 of terminal wealth, DKK 43.445043 EPS at 15x, a 15.48% EPS CAGR from the normalized anchor, or a 24.194733x exit P/E on modeled Base EPS. None is supported by the Base case. The repair makes the conclusion stronger: probability-weighted gross return falls from non-controlling history of 10.12% to 7.92%, while net-SGD falls from 8.06% to 5.84%.

Bull still clears 20% at 26.05%, but it now contributes only 10% to expected wealth. That is an appropriately bounded tail rather than an implicit central case. The 20% claim most likely to be wrong would be any narrative implying that Bull's outcome is readily repeatable; the repaired audit does not make that claim.

7. Two-sided valuation challenge and repair decision

Strongest reason the repaired model may still be too optimistic

The Base terminal margin is the remaining optimistic pressure point, followed by Bull's 20x exit P/E. An 18x non-controlling Bull sensitivity reduces Bull wealth to DKK 835.502244 and Bull IRR from 26.05% to 23.66%, a 2.39-point scenario change. However, it reduces probability-weighted IRR by only 0.80 point under the repaired 10% Bull weight. More importantly, 18x is an alternative inside VP's evidence range, not an evidenced correction: 20x is expressly conditional on 14.70% EPS CAGR, 46.31% margin, pipeline wins and high utilization, and remains below the prior growth-era range. There is no basis to reopen VP.

The probability repair itself is conservative enough. Cutting Bull again from 10% to 5% and moving the five points to Base lowers gross weighted IRR from 7.92% to 6.75%, a 1.17-point change. Moving those five points to Bear would lower it to 5.91%, just 2.01 points, but that simultaneously increases Bear probability without new evidence. The original objection concerned over-weighting correlated Bull wins; its logically matched repair reallocates removed Bull probability to Base. Eliminating or redirecting the remaining Bull tail to Bear is a new thesis call, not a correction supported by the sealed record.

Strongest reason the model may be too bearish

Bear combines negative revenue CAGR, a 27.81% operating margin, DKK 12bn financial expense, dividend cuts and a 10x exit P/E even though Novo remains profitable and globally scaled. A non-controlling 12x sensitivity raises Bear wealth from DKK 160.960707 to DKK 185.012849 and Bear IRR from negative 11.04% to negative 8.53%, a 2.51-point improvement. That shows how much of the downside comes from multiple compression after operating damage is already charged.

It does not prove 10x is wrong. Bear describes a structurally impaired and shrinking franchise; 10x values positive surviving EPS rather than assuming liquidation. The 12x result is therefore a two-sided sensitivity, not a proposed repair. Under 30% Bear weight it changes aggregate return by less than one point.

Return-model objection inventory

Objection	Classification	Quantified result	Decision
Original 20% Bull probability	MATERIAL_RESOLVED	Repaired PW gross 7.92%; net-SGD 5.84%	30/60/10 controls everywhere
P/E method, denominator and bridge	IMMATERIAL	All hashes and arithmetic replay exactly	No VP repair
Base buyback support	IMMATERIAL	No-buyback Base gross IRR 9.37%; negative 0.90 point	Monitor only
Further Bull cut to 5%, moved to Base	IMMATERIAL	PW gross IRR 6.75%; negative 1.17 points	10% tail is conservative enough
Bull 18x valuation sensitivity	IMMATERIAL as an objection	Bull negative 2.39 points; PW negative 0.80 point	20x remains supportable, not corrected
Bear 12x sensitivity	IMMATERIAL as an objection	Bear positive 2.51 points; aggregate below one point	Preserve as non-controlling challenge

RETURN_MODEL_OBJECTION_STATUS: MATERIAL_RESOLVED

The repaired files incorporate the objection rather than merely acknowledging it: every controlling operating expectation, terminal-wealth calculation, gross return, net-SGD return, threshold test and scorecard uses 30% / 60% / 10%. The old 30% / 50% / 20% output is clearly labeled non-controlling. CSA independently replayed the change and left publication pending only for this required RT confirmation. This appendix supplies that confirmation.

8. P&C insurer return-bridge applicability

Not applicable. Novo Nordisk is a non-P&C operating pharmaceutical company. P/E is the preflight-locked primary method, and no insurer bridge is required or present.

9. The signal that forces an exit

Force an exit review if, during the next two reported quarters, adjusted Obesity and Diabetes care sales growth at CER trails estimated treated-volume growth by at least ten percentage points in both quarters and adjusted metabolic Segment operating margin is below 37% in the second quarter. This combination distinguishes a temporary rebate estimate from a broken price-volume bargain. It invalidates Base because Base requires access-led volume to offset price/mix and sustain roughly a 41.3% terminal metabolic margin.

If Novo does not disclose quarterly adjusted segment margin, use adjusted consolidated operating margin below 37% with the same metabolic sales-versus-volume test. Require two consecutive quarters to reduce 340B and gross-to-net noise. Independently, downgrade the Rare disease recovery if Segment operating margin has not exceeded 10% on a trailing basis by year-end 2027.

10. Conviction at the end of red team

Conditional: the thesis and repaired return model survive this red team, but expected return remains inadequate for the 20% rubric and below the CIO mandate on a probability-weighted net-SGD basis. The former material defect is fixed because the correlated Bull stack now has a restrained 10% weight, and the correction flows mechanically through gross, net and threshold fields. The scenario-specific returns remain intentionally unchanged, so the repair does not disguise weak Base economics or punitive Bear downside.

This is not a BUY vote. The audited 60/100 score remains Reject, Base gross IRR is only 10.28%, repaired weighted gross IRR is 7.92%, repaired weighted net-SGD is 5.84%, and CIO actionability remains WATCH because Base net-SGD is 8.15% while Management and Moat remain YELLOW. No trade, sizing, owner action or portfolio mutation is authorized. From the RT return-model gate alone, however, the probability objection is **MATERIAL_RESOLVED** and no further VP, CS or CSA repair is required.

Appendix D - Data Package (Raw Historicals)

Novo Nordisk A/S - ER2 Data Package

Run ID: `pulse-cio-20260909T220234+0800` Action ID: `CIO-20260909-NOVO-ER2` Information cutoff: 2026-09-09 22:02:34 SGT Security: Copenhagen B share, `XCSE:NOVO-B`, queue identity `NVO.CO`, FMP provider symbol `NOVO-B.CO`; NYSE ADR excluded. Currency / scale: DKK; tables use DKK billion unless marked DKK million. Fiscal year ends 31 December. Latest full period is Q2/H1 2026 ended 2026-06-30; TTM is FY2025 minus H1 2025 plus H1 2026.

0a. Industry classification and disclosure inventory

Novo Nordisk is a Danish innovative biopharmaceutical issuer reporting IFRS through local annual/interim reports and Form 20-F/6-K. The pharma disclosure inventory is triggered because live FMP product, segment and geography endpoints are empty and the company discloses richer therapy, brand, geography, pipeline, capacity and market-share data in official workbooks and investor materials. Live FMP statements populate only under `NOVO-B.CO`; the queue alias `NVO.CO` is empty. Official Novo workbooks control whenever FMP is empty, differently classified or rounded.

Live sources checked in this D run

Source family	Live source	Coverage / use	Archived D-run evidence
FMP statements	[income statement](https://financialmodelingprep.com/stable/income-statement?symbol=NOVO-B.CO&period=annual), [cash flow](https://financialmodelingprep.com/stable/cash-flow-statement?symbol=NOVO-B.CO&period=annual), [balance sheet](https://financialmodelingprep.com/stable/balance-sheet-statement?symbol=NOVO-B.CO&period=annual)	FY2021-FY2025 consolidated data, R&D, cash flow, balance sheet	`raw/pulse-cio-20260909T220234+0800/d/fmp_*_annual.json`
FMP product / geography	[product annual](https://financialmodelingprep.com/stable/revenue-product-segmentation?symbol=NOVO-B.CO&period=annual), [product quarter](https://financialmodelingprep.com/stable/revenue-product-segmentation?symbol=NOVO-B.CO&period=quarter), [geography annual](https://financialmodelingprep.com/stable/revenue-geographic-segmentation?symbol=NOVO-B.CO&period=annual)	All returned `[]`; official-source override required	`raw/pulse-cio-20260909T220234+0800/d/fmp_product_*.json`, `fmp_geo_annual.json`
Annual workbooks	[FY2025 workbook](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/irmaterial/annual_report/2026/Q4-2025-financial-workbook.xlsx) and FY2021-FY2024 workbooks from the [results archive](https://www.novonordisk.com/investors/financial-results.html)	Five-year therapy, brand, geography, segment and statutory histories	`raw/pulse-cio-20260909T220234+0800/d/q4_2021_workbook.xlsx` through `q4_2025_workbook.xlsx`
Interim workbooks	[Q2/H1 2026 workbook](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/pdfs/financial-results/2026/Financial%20Workbook%20Q2%202026.xlsx); Q1 2026 and Q3 2025 workbooks	Last-four-quarter trend; 2026 product taxonomy; H1/TTM	`raw/pulse-cio-20260909T220234+0800/d/q3_2025_workbook.xlsx`, `q1_2026_workbook.xlsx`, `q2_2026_workbook.xlsx`
Annual filing	[Annual Report 2025](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/irmaterial/annual_report/2026/novo-nordisk-annual-report-2025.pdf), [Form 20-F](https://www.sec.gov/Archives/edgar/data/353278/000035327826000012/nvo-20251231.htm)	IFRS policies, segments, capacity, ownership and governance	`raw/pulse-cio-20260909T220234+0800/d/annual_report_2025.pdf`; QF/QFR 20-F evidence
Latest results	[Q2 2026 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590), [Q2 2026 presentation](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/pdfs/financial-results/2026/Q2-2026-Full%20presentation.pdf)	Current sales, margin bridge, guidance, market share, pipeline and capital allocation	`raw/pulse-cio-20260909T220234+0800/d/q2_2026_presentation.pdf`

Source family	Live source	Coverage / use	Archived D-run evidence
Earnings calls	Live FMP [transcript endpoint](https://financialmodelingprep.com/stable/earning-call-transcript?symbol=NOVO-B.CO)	Q1 2026, Q4 2025, Q3 2025; Q2 2026 returned [ ]	`raw/pulse-cio-20260909T220234+0800/d/fmp_transcript_q*.json`
R&D event	[R&D investor event, 7 June 2026](https://www.novonordisk.com/content/dam/ncorp/global/en/investors/pdfs/ada/novo-nordisk-r-and-d-investor-presentation-2026.pdf)	Prescription data, trial results and milestone timing	`raw/pulse-cio-20260909T220234+0800/d/ada_2026_rd_event.pdf`
Governance	[Annual Report governance](https://annualreport.novonordisk.com/2025/governance/corporate-governance.html), [ownership structure](https://www.novonordisk.com/investors/stock-information/share-and-ownership-structure.html)	Foundation control, A/B voting rights, board renewal, free float	Live official pages
Capacity / BD	[Athlone expansion](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916508), [Akero completion](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916467), [Omeros agreement](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916434)	Manufacturing and pipeline additions	Live official releases

Search inventory: `Segment operating profit`, `Sales - YTD`, `Sales IFRS reconciliation`, `US Operations`, `International Operations`, `GLP-1 market share`, `Wegovy prescriptions`, `gross margin`, `340B`, `realised prices`, `CAPEX`, `manufacturing capacity`, `R&D milestones`, `CagriSema`, `zenagamtide`, `UBT251`, `etavopivat`, `denecimig`, `zaltenibart`, `A shares`, `B shares`, `Novo Holdings`, `repurchases`, and `dividend`.

Completeness matrix

Dataset / table family	Official source searched	Search terms / table names	Years available	Included?	Exclusion / limitation	Downstream relevance
Consolidated financials	Annual reports; `IS & OCI`; `CF`; `BS`	Sales; operating profit; R&D; capex; FCF	FY2021-FY2025; H1/TTM 2026	Yes	-	ROIC, cash conversion, synthesis
Segment economics	Annual/interim workbooks	Segment sales; Segment operating profit	FY2021-FY2025; H1/TTM 2026	Yes	FY2021 label was Biopharm	Segment appendices, statutory bridge
Therapy / brand sales	`Sales - YTD`, `Sales - Q`, 2026 reconciliation	GLP-1; insulin; obesity; Wegovy; Ozempic; rare disease	FY2021-FY2025; last four quarters; TTM	Yes	Some product groups not unbundled	Pricing/share forecasts
Geography	Workbooks and Q2 deck	US; IO; EUCAN; Emerging Markets; APAC; China	Five years with 2025 boundary; Q2 2026	Yes	Pre/post-2025 regions not fully comparable	Mix, pricing, FX
Volume / market share	Annual report; Q2 and R&D decks	value share; volume share; NBRx; TRx	Selected point-in-time periods	Yes	No clean issuer five-year series	Moat and competition
Price / reimbursement	Releases, calls, annual report	realised price; 340B; MFN; access; cash channel	Current qualitative / selected quantified	Yes	Net price by brand not disclosed	Revenue sensitivity
Capacity / capex	Annual reports, decks, capacity releases	API; fill-finish; tableting; packaging	Five-year capex; current projects	Yes	Physical dose capacity not disclosed	Supply and cash conversion
Pipeline	Annual report, results, R&D event	trial; phase 3; regulatory decision	Current milestone schedule	Yes	No probability-adjusted values	Growth options / downside
Capital / governance	Annual report, EGM, buyback releases	A/B shares; voting; dividend; buyback	FY2021-FY2025; current	Yes	-	Governance and dilution

Pharma KPI history

KPI family, DKK bn unless stated	Granularity	FY2021	FY2022	FY2023	FY2024	FY2025	Latest interim / TTM	Source
GLP-1 diabetes sales	Therapy	53.597	83.371	123.132	149.125	152.202	159.721 TTM	Annual workbooks; QF P4
Insulin sales	Therapy	56.006	52.952	48.022	55.373	53.137	57.119 TTM	Annual workbooks; QF P4
Diabetes-care sales	Therapy	113.197	139.548	173.466	206.618	207.109	218.947 TTM	Annual workbooks; QF P4

KPI family, DKK bn unless stated	Granularity	FY2021	FY2022	FY2023	FY2024	FY2025	Latest interim / TTM	Source
Obesity-care sales	Therapy	8.400 combined	16.864	41.632	65.146	82.347	90.046 TTM	Annual workbooks; QF P4
Wegovy sales	Brand	Not split	6.188	31.343	58.206	79.106	87.689 TTM incl. pill	Annual workbooks; QF P4
Rare-disease sales	Segment	19.203 Biopharm	20.542	17.163	18.639	19.608	20.438 TTM	Annual workbooks; QF P4
R&D expense	Consolidated	17.772	24.047	32.443	48.062	52.039	21.743 H1 adjusted	Live FMP IS; Q2 deck
PP&E capex	Consolidated	6.335	12.146	25.806	47.164	60.140	56.043 TTM	Official workbooks; QF P6
Core FCF	Consolidated	48.665	66.741	83.102	73.804	58.962	76.731 TTM comparable	Official workbooks; QF P6
Market share	Point in time	Not backfilled	Not backfilled	Not backfilled	Not backfilled	30.1% diabetes value share	58% IO GLP-1 volume share, Apr-2026	Q4 2025 / Q2 2026 decks

The physical production-volume and brand-level net-price histories are true non-disclosures. Prescription and IQVIA share points are snapshots, not an invented annual series. No warehouse cache was read.

1. Reporting structure and taxonomy

Novo Nordisk reports two IFRS business segments. `Obesity and Diabetes care` includes GLP-1 diabetes, insulin, other diabetes and obesity medicines. `Rare disease` includes rare blood, endocrine and other rare products.

Segment	FY2025 revenue, DKK bn	% of total	FY2025 Segment operating profit, DKK bn	Description / source
Obesity and Diabetes care	289.456	93.7%	126.446	FY2025 workbook `IS & OCI`
Rare disease	19.608	6.3%	1.212	FY2025 workbook `IS & OCI`
Consolidated	309.064	100.0%	127.658	Exact additive tie

The `Biopharm` segment was renamed/reframed as `Rare disease` in FY2022; FY2021 retains the old label. The modeled segment structure is stable from FY2022. Commercial geography changed in 2025 from North America Operations to US `Operations`, with Canada in `EUCAN`; old geography is not silently relabelled. H1 2026 introduced `Wegovy pill` and renamed the diabetes oral row `Ozempic pill / Rybelsus` within the unchanged Obesity and Diabetes care segment.

FY2025 sales were DKK 173.166bn in US Operations (56.0%) and DKK 135.898bn in International Operations (44.0%). International Operations comprised EUCAN DKK 66.091bn, Emerging Markets DKK 30.436bn, APAC DKK 20.713bn and Region China DKK 18.658bn. These are commercial regions, not IFRS reportable segments, and no statutory regional profit is disclosed.

2. Consolidated historicals

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, DKK bn	140.800	176.954	232.261	290.403	309.064	Live FMP annual IS; official workbooks
Statutory operating profit, DKK bn	58.644	74.809	102.574	128.339	127.658	Live FMP annual IS; official workbooks
Operating margin	41.7%	42.3%	44.2%	44.2%	41.3%	Calculated
Net income, DKK bn	47.757	55.525	83.683	100.988	102.434	Live FMP annual IS; annual report
Diluted EPS, DKK	10.37	12.22	18.62	22.63	23.03	Live FMP annual IS; annual report
Diluted shares, million	4,605.3	4,544.6	4,494.8	4,463.0	4,447.7	Live FMP annual IS; annual report
PP&E capex, DKK bn	6.335	12.146	25.806	47.164	60.140	Official workbooks; excludes intangibles
Core FCF, DKK bn	48.665	66.741	83.102	73.804	58.962	OCF less PP&E capex; QF P6
ROIC	59.3%	70.2%	79.4%	46.3%	33.6%	Calculated below

ROIC is NOPAT divided by year-end invested capital. NOPAT equals operating profit times one minus the reported effective tax rate. Invested capital equals shareholders' equity plus total debt less cash and short-term investments. Tax rates were 19.17%, 19.60%, 20.05%, 20.60% and 21.53%; NOPAT was DKK 47.405bn, 60.146bn, 82.004bn, 101.899bn and 100.173bn. Invested capital was DKK 79.906bn, 85.696bn, 103.337bn, 219.965bn and 298.043bn. The 2024-2025 denominator expanded with debt-funded Catalent sites and capacity investment.

FMP's FY2025 `capitalExpenditure` is DKK 90.113bn because it combines DKK 60.140bn PP&E with DKK 29.973bn intangible purchases. The official PP&E line controls core FCF.

3. Segment historicals

Obesity and Diabetes care

Obesity and Diabetes care	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, DKK bn	121.597	156.412	215.098	271.764	289.456	Official annual workbooks
YoY, reported DKK	n/a	28.6%	37.5%	26.3%	6.5%	Calculated
Segment operating profit, DKK bn	49.538	67.395	99.623	127.719	126.446	Official annual workbooks
Margin on Segment operating profit	40.7%	43.1%	46.3%	47.0%	43.7%	Calculated

Rare disease

Rare disease	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, DKK bn	19.203 Biopharm	20.542	17.163	18.639	19.608	Official annual workbooks
YoY, reported DKK	n/a	7.0%	(16.4%)	8.6%	5.2%	Calculated
Segment operating profit, DKK bn	9.106 Biopharm	7.414	2.951	0.620	1.212	Official annual workbooks
Margin on Segment operating profit	47.4%	36.1%	17.2%	3.3%	6.2%	Calculated

The exact disclosed common basis is `Segment operating profit`. No segment cost-of-sales or opex allocation is disclosed; none is inferred.

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

Sealed packet: `C:\Users\Admin\OneDrive\GPT\ER 2.0\Novo Nordisk\statutory_bridge.json`. QFR-sealed SHA-256: `d0b9c1cdcfe8d679ae40ec1db084cd3ba50bead6e8b9057140d5cd35cc251610`. D recomputed the exact hash and reran the validator: `STATUTORY_BRIDGE_VALID`. Currency is DKK; scale is millions; basis is `issuer_disclosed`. Corporate/unallocated and operating-bridge arrays are empty in both periods and no zero placeholders are added.

FY2025 - exact sealed bridge

Bridge line	Classification	Value, DKK m	Source ID	Running subtotal, DKK m
Obesity and Diabetes care	segment profit	126,446	FY2025_OFFICIAL	126,446
Rare disease	segment profit	1,212	FY2025_OFFICIAL	127,658
Sum of reportable segment profit	segment profit subtotal	127,658	FY2025_OFFICIAL	127,658
Consolidated Segment operating profit	subtotal	127,658	FY2025_OFFICIAL	127,658
Statutory operating income	statutory subtotal	127,658	FY2025_OFFICIAL	127,658
Financial income	other_non_operating	9,660	FY2025_OFFICIAL	137,318
Financial expenses	other_non_operating	(6,778)	FY2025_OFFICIAL	130,540
Pretax income	statutory subtotal	130,540	FY2025_OFFICIAL	130,540
Income taxes	tax	(28,106)	FY2025_OFFICIAL	102,434
Net income	statutory subtotal	102,434	FY2025_OFFICIAL	102,434

All five residuals are DKK 0m. Rounding unit is DKK 1m; tolerance DKK 65.27m.

TTM ended 2026-06-30 - exact sealed bridge

Bridge line	Classification	Value, DKK m	Source ID	Running subtotal, DKK m
Obesity and Diabetes care	segment profit	141,624	TTM_RECONCILIATION	141,624
Rare disease	segment profit	473	TTM_RECONCILIATION	142,097
Sum of reportable segment profit	segment profit subtotal	142,097	TTM_RECONCILIATION	142,097
Consolidated Segment operating profit	subtotal	142,097	TTM_RECONCILIATION	142,097
Statutory operating income	statutory subtotal	142,097	TTM_RECONCILIATION	142,097
Financial income	other_non_operating	8,288	TTM_RECONCILIATION	150,385
Financial expenses	other_non_operating	(1,636)	TTM_RECONCILIATION	148,749
Pretax income	statutory subtotal	148,749	TTM_RECONCILIATION	148,749
Income taxes	tax	(32,306)	TTM_RECONCILIATION	116,443
Net income	statutory subtotal	116,443	TTM_RECONCILIATION	116,443

All five residuals are DKK 0m. Rounding unit is DKK 1m; tolerance DKK 74.3745m. TTM is exactly FY2025 minus H1 2025 plus H1 2026.

Forecast-driver schedule

Historical bridge line	FY2025, DKK m	TTM, DKK m	Forecast treatment	Driver and source	Bear / base / bull rule
Obesity and Diabetes care - Segment operating profit	126,446	141,624	Independently forecast segment revenue and exact margin	Sections 4-6 product, price, volume and capacity evidence	Bear: price/share pressure; Base: volume offsets price; Bull: access and launches
Rare disease - Segment operating profit	1,212	473	Independently forecast segment revenue and exact margin	Sections 4-6 launch and pipeline evidence	Bear: margin remains depressed; Base: recovery; Bull: pipeline contribution
Financial income	9,660	8,288	Separate hedge/cash-yield schedule	FY2025 workbook; Q2 2026 net-financial outlook	Bear: lower hedge/yield; Base: normalisation; Bull: favourable hedge/yield
Financial expenses	(6,778)	(1,636)	Debt and rate schedule	H1 borrowings DKK 140.127bn; Catalent financing	Bear: higher debt/rates; Base: current schedule; Bull: deleveraging
Income taxes	(28,106)	(32,306)	Tax-rate schedule on pretax income	FY2025 21.5%; 2026 guidance 21%-23%	Bear 23%; Base 22%; Bull 21%

No corporate/unallocated or operating adjustment is forecast. Financial income and expense remain separate below-line items; tax remains post-pretax.

STATUTORY_BRIDGE_STATUS: VERIFIED - CLEARED FOR FORECASTING

4. Product and sub-segment historicals

All values below are issuer-disclosed DKK billions from annual workbook `Sales - YTD` tables; none is back-solved. Product rows are nested business context, not additional reportable segments, and must not be added to segment totals a second time.

Segment	Product / disclosed group	What it is	Dollar disclosure?	FY2023 / FY2024 / FY2025 revenue, DKK bn	Source
Obesity and Diabetes care	Ozempic	Injectable semaglutide for type 2 diabetes	Yes	95.718 / 120.342 / 127.089	FY2023-FY2025 workbooks
Obesity and Diabetes care	Victoza	Injectable liraglutide for diabetes	Yes	8.664 / 5.482 / 3.020	FY2023-FY2025 workbooks
Obesity and Diabetes care	Rybelsus	Oral semaglutide diabetes product; renamed Ozempic pill / Rybelsus in 2026	Yes	18.750 / 23.301 / 22.093	FY2023-FY2025 workbooks
Obesity and Diabetes care	Awiqli	Once-weekly basal insulin	Yes	Not launched / 0.019 / 0.410	FY2024-FY2025 workbooks
Obesity and Diabetes care	Tresiba	Long-acting insulin	Yes	7.752 / 9.905 / 12.049	FY2023-FY2025 workbooks

Segment	Product / disclosed group	What it is	Dollar disclosure?	FY2023 / FY2024 / FY2025 revenue, DKK bn	Source
Obesity and Diabetes care	Xultophy	Basal insulin / GLP-1 fixed combination	Yes	3.219 / 4.503 / 4.619	FY2023-FY2025 workbooks
Obesity and Diabetes care	Levemir	Long-acting insulin being phased down	Yes	3.934 / 4.668 / 1.677	FY2023-FY2025 workbooks
Obesity and Diabetes care	Ryzodeg	Premix insulin	Yes	3.730 / 4.929 / 5.382	FY2023-FY2025 workbooks
Obesity and Diabetes care	NovoMix	Premix insulin	Yes	5.844 / 5.860 / 4.933	FY2023-FY2025 workbooks
Obesity and Diabetes care	Fiasp	Fast-acting insulin	Yes	2.173 / 1.869 / 2.818	FY2023-FY2025 workbooks
Obesity and Diabetes care	NovoRapid	Fast-acting insulin	Yes	13.776 / 16.653 / 15.765	FY2023-FY2025 workbooks
Obesity and Diabetes care	Human insulin	Human insulin portfolio	Yes	7.594 / 6.967 / 5.484	FY2023-FY2025 workbooks
Obesity and Diabetes care	Other Diabetes care	Mainly NovoNorm, needles and GlucaGen HypoKit	Group only	2.312 / 2.120 / 1.770	FY2023-FY2025 workbooks
Obesity and Diabetes care	Wegovy	Semaglutide obesity franchise; injectable in annual history	Yes	31.343 / 58.206 / 79.106	FY2023-FY2025 workbooks
Obesity and Diabetes care	Saxenda	Liraglutide obesity product	Yes	10.289 / 6.940 / 3.241	FY2023-FY2025 workbooks
Rare disease	Haemophilia A products	Disclosed subcategory within rare blood disorders	Yes	2.422 / 2.454 / 2.414	FY2023-FY2025 workbooks
Rare disease	Haemophilia B products	Disclosed subcategory within rare blood disorders	Yes	1.061 / 1.306 / 1.412	FY2023-FY2025 workbooks
Rare disease	NovoSeven	Bypassing agent within rare blood disorders	Yes	7.958 / 7.983 / 7.326	FY2023-FY2025 workbooks
Rare disease	Rare endocrine disorders	Mainly Norditropin and Sogroya	Group only	3.836 / 4.993 / 5.959	FY2023-FY2025 workbooks
Rare disease	Other Rare disease	Mainly Vagifem and Activelle	Group only	1.551 / 1.508 / 1.694	FY2023-FY2025 workbooks

Longest clean brand / therapy history

Product or therapy, DKK bn	FY2021	FY2022	FY2023	FY2024	FY2025	H1 2026 reported	TTM 2026-06-30	Source
Ozempic	33.705	59.750	95.718	120.342	127.089	71.855	134.424	Annual/H1 workbooks; QF P4
Rybelsus / Ozempic pill	4.838	11.299	18.750	23.301	22.093	10.343	21.088	Annual/H1 workbooks; QF P4
Victoza	15.054	12.322	8.664	5.482	3.020	3.261 reported; 0.515 adjusted	4.209	Annual/H1 workbooks; QF P4
Total GLP-1 diabetes	53.597	83.371	123.132	149.125	152.202	85.459 reported; 69.515 adjusted	159.721 reported	Annual/H1 workbooks; QF P4
Total insulin	56.006	52.952	48.022	55.373	53.137	31.725 reported; 24.586 adjusted	57.119 reported	Annual/H1 workbooks; QF P4
Total obesity care	8.400 combined	16.864	41.632	65.146	82.347	46.495 reported; 44.064 adjusted	90.046 reported	Annual/H1 workbooks; QF P4
Wegovy injectable	Not split from Saxenda	6.188	31.343	58.206	79.106	39.997	82.215	Annual/H1 workbooks; QF P4
Wegovy pill	Not applicable	Not applicable	Not applicable	Not applicable	Not launched	5.474	5.474	H1 2026 workbook
Rare blood disorders	10.217	11.706	11.776	12.138	11.955	5.529	11.467	Annual/H1 workbooks; QF P4
Rare endocrine disorders	7.303	7.138	3.836	4.993	5.959	3.931	7.158	Annual/H1 workbooks; QF P4

H1 2026 `reported` columns include a DKK 26.760bn 340B provision reversal, allocated DKK 25.514bn to Obesity and Diabetes care and DKK 1.246bn to Rare disease. Adjusted figures remove that non-recurring reversal. Reported TTM values remain the QFR-sealed statutory/product basis; downstream forecasts must normalise the event rather than silently replace the statutory anchor.

Products with growth-only disclosure

Segment	Product	Disclosure method	Last four quarters YoY growth	Source
Both segments	None among the material rows listed above	Official workbooks provide absolute DKK sales and CER growth	Not applicable	Official quarterly workbooks

Subcomponents named only in group footnotes are true non-disclosures, not growth-only rows: NovoEight, Esperoct, Refixia, NovoThirteen and Alhemo are grouped with other rare-blood products; Norditropin and Sogroya are grouped in rare endocrine disorders; NovoNorm, needles and GlucaGen HypoKit are grouped in Other Diabetes care. Their separate dollar sales and separate quarterly growth rates are not provided in the searched workbooks.

5. Most recent quarterly trend

Company FY ends 31 December. Most recently completed fiscal quarter: FY2026 Q2, covering 1 April-30 June 2026, reported on 4 August 2026 with the earnings call on 5 August via the [official Q2 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590).

Segment trend

Quarter	Segment	Revenue, DKK bn	YoY growth at CER	Segment operating margin	Source
Q3 FY2025	Obesity and Diabetes care	70.255	11%	34.5%	Q3 2025 workbook, quarter derived from 9M less H1
Q3 FY2025	Rare disease	4.721	9%	(11.4%)	Q3 2025 workbook, quarter derived from 9M less H1
Q3 FY2025	Consolidated	74.976	11%	31.6%	Q3 2025 workbook / [release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916445)
Q4 FY2025	Obesity and Diabetes care	73.795	(2%)	42.1%	Q4 2025 workbook
Q4 FY2025	Rare disease	5.349	0%	12.9%	Q4 2025 workbook
Q4 FY2025	Consolidated	79.144	(2%)	40.1%	Q4 2025 workbook / [release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916483)
Q1 FY2026	Obesity and Diabetes care	91.362 reported; 65.848 adjusted	32% reported; (4%) adjusted	63.5% reported	Q1 2026 workbook / [release](https://www.novonordisk.com/content/nncorp/global/en/news-and-media/news-and-ir-materials/news-details.html?id=916542)
Q1 FY2026	Rare disease	5.461 reported; 4.215 adjusted	26% reported; (2%) adjusted	29.6% reported	Q1 2026 workbook
Q1 FY2026	Consolidated	96.823 reported; 70.063 adjusted	32% reported; (4%) adjusted	61.6% reported; 46.9% adjusted	Q1 2026 workbook / presentation
Q2 FY2026	Obesity and Diabetes care	73.581	3% reported; 7% adjusted	38.5% reported	Q2 2026 workbook
Q2 FY2026	Rare disease	4.907	3% reported; 6% adjusted	(26.4%) reported	Q2 2026 workbook
Q2 FY2026	Consolidated	78.488	3% reported; 7% adjusted	34.5% reported; 42.5% adjusted	Q2 2026 workbook / release

The Q3 and Q4 segment margins are quarter-only arithmetic from cumulative segment profit and revenue; every source component is official. Q1 reported margins are inflated by the 340B provision reversal. Q2 reported profit includes DKK 6.328bn non-cash pipeline-asset impairments, including DKK 4.0bn for monlunabant. The Q2 presentation's adjusted operating profit is DKK 33.389bn and adjusted margin 42.5%.

Therapy and major-product trend

Quarter	Metric	Revenue, DKK bn	YoY growth at CER	Product margin	Source
Q3 FY2025	Total GLP-1 diabetes	36.735	11%	Not disclosed	Q3 workbook `Sales - Q`
Q3 FY2025	Total obesity care	21.106	18%	Not disclosed	Q3 workbook `Sales - Q`
Q3 FY2025	Wegovy	20.354	23%	Not disclosed	Q3 workbook `Sales - Q`
Q4 FY2025	Total GLP-1 diabetes	37.527	(5%)	Not disclosed	Q4 workbook `Sales - Q`
Q4 FY2025	Total obesity care	22.445	11%	Not disclosed	Q4 workbook `Sales - Q`
Q4 FY2025	Wegovy	21.864	17%	Not disclosed	Q4 workbook `Sales - Q`
Q1 FY2026	Total GLP-1 diabetes	48.675 reported; 32.731 adjusted	31% reported; (11%) adjusted	Not disclosed	Q1 workbook reconciliation
Q1 FY2026	Total obesity care	23.343 reported; 20.912 adjusted	35% reported; 22% adjusted	Not disclosed	Q1 workbook reconciliation

Quarter	Metric	Revenue, DKK bn	YoY growth at CER	Product margin	Source
Q1 FY2026	Wegovy injectable / pill	20.513 / 2.256	26% / new launch	Not disclosed	Q1 workbook reconciliation
Q2 FY2026	Total GLP-1 diabetes	36.784	(2%) reported; 2% adjusted	Not disclosed	Q2 workbook reconciliation
Q2 FY2026	Total obesity care	23.152	15% reported; 16% adjusted	Not disclosed	Q2 workbook reconciliation
Q2 FY2026	Wegovy injectable / pill	19.484 / 3.218	0% / new launch	Not disclosed	Q2 workbook reconciliation

Official Q2 evidence adds the operating drivers. Adjusted Q2 sales increased 7% at CER from GLP-1 volume growth and favourable US rebate adjustments. Lower realised prices remained an offset. Wegovy pill exceeded 265,000 weekly US prescriptions in the week ended 17 July and had more than five million cumulative prescriptions since launch. International Operations Q2 obesity sales were DKK 10.328bn, up 37% at CER, while the licensed IQVIA snapshot showed Novo as the IO GLP-1 volume leader with 58% share.

6. Management commentary on forward growth

The table uses short verbatim excerpts only from live-fetched official releases or live FMP transcripts whose response date matches the call. Each excerpt is tied to a specific speaker and modeling topic. The Q2 2026 FMP transcript returned `[]` for `NOVO-B.CO`, `NVO.CO` and `NVO`; no Q2 call-only dialogue is quoted, and the official release and presentation supply the Q2 evidence while the unavailable text transcript is classified in Section 10.

Obesity and Diabetes care

Fiscal period / call date	Speaker	Verbatim excerpt	Topic	Modeling interpretation	Source
Q2 FY2026 / 2026-08-05	Mike Doustdar, CEO	“The increased US GLP-1 momentum… has led us to further raise our 2026 guidance”	Guidance / GLP-1	Current volume and launches improved the full-year floor, but guidance remains negative-to-flat	[Q2 release, 2026-08-04](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590)
Q1 FY2026 / 2026-05-06	Mike Doustdar, CEO	“Price is dynamic and a function of volume uptake.”	Pricing	Model price and volume jointly; do not extrapolate list price or script growth alone	Live FMP Q1 transcript, dated 2026-05-06
Q1 FY2026 / 2026-05-06	Jamey Millar, EVP US Operations	“titration is happening as expected and comparable to what we see with injectable Wegovy”	Pill persistence / dose mix	Early pill sales include titration; mature-dose mix is not yet proven	Live FMP Q1 transcript
Q1 FY2026 / 2026-05-06	Karsten Knudsen, CFO	“expect us to lean in on R&D investment in the coming quarters”	R&D	Do not use Q1 R&D ratio as the steady state	Live FMP Q1 transcript
Q1 FY2026 / 2026-05-06	Karsten Knudsen, CFO	“minus 10% to up to minus 15% price erosion”	Ozempic US price	Explicit downside anchor for US diabetes GLP-1 price	Live FMP Q1 transcript
Q4 FY2025 / 2026-02-04	Mike Doustdar, CEO	“we feel incredibly confident that we will be able to supply the U.S. market”	Wegovy pill supply	Near-term US oral supply constraint is reduced, not eliminated globally	Live FMP Q4 transcript, dated 2026-02-04
Q4 FY2025 / 2026-02-04	Karsten Knudsen, CFO	“the gross margin on the Wegovy pill is below that of the Wegovy injectable”	Product margin	Pill mix can grow sales while diluting gross margin versus injectable	Live FMP Q4 transcript
Q4 FY2025 / 2026-02-04	Mike Doustdar, CEO	“price reduction… is our investment for the future and for capturing more patients”	Access / price-volume	Lower price is strategic, but volume elasticity must be demonstrated	Live FMP Q4 transcript
Q3 FY2025 / 2025-11-05	Mike Doustdar, CEO	“we will concentrate on these areas where we can make the greatest difference”	Portfolio focus	Capital should remain concentrated in diabetes, obesity and related comorbidities	Live FMP Q3 transcript, dated 2025-11-05
Q3 FY2025 / 2025-11-05	Ludovic Helfgott, EVP	“the priority of our Wegovy pill launch is the U.S.”	Launch sequencing	Ex-US pill contribution was secondary entering 2026; later launches are upside to that anchor	Live FMP Q3 transcript
R&D event / 2026-06-07	Martin Holst Lange, CSO section	“Obesity data expected in H1 2027”	UBT251 timing	No UBT251 commercial contribution belongs inside the 2026 base	[R&D event deck](https://www.novonordisk.com/content/dam/nncorp/global/en/investors/pdfs/ada/novo-nordisk-r-and-d-investor-presentation-2026.pdf)
R&D event / 2026-06-07	Martin Holst Lange, CSO section	“REDEFINE 3… is expected to read-out in second half of 2027”	CagriSema CVOT	Regulatory / commercial timing remains dependent on a future cardiovascular-outcome readout	R&D event deck

Rare disease

Fiscal period / call date	Speaker	Verbatim excerpt	Topic	Modeling interpretation	Source
Q4 FY2025 / 2026-02-04	Mike Doustdar, CEO	“Rare disease is now positioned for sustained growth”	Segment trajectory	Management expects pipeline-led recovery, but current TTM margin remains 2.3%	Live FMP Q4 transcript
Q3 FY2025 / 2025-11-05	Mike Doustdar, CEO	“we have now submitted Mim8 for regulatory approval in both U.S. and EU”	Denecimig / Mim8	Submission supports a launch path; approval and uptake are not yet revenue	Live FMP Q3 transcript
Q3 FY2025 / 2025-11-05	Martin Lange, CSO	“we are intensifying our focus on key therapeutic areas”	Omeros / Akero fit	Zaltenibart is complementary pipeline, not current earnings	Live FMP Q3 transcript
Q1 FY2026 / 2026-05-06	Mike Doustdar, CEO	“the main aim is to make sure we have multiple legs to stand on”	Rare pipeline diversification	Forecast separate existing-product recovery from risk-adjusted future launches	Live FMP Q1 transcript

Rare disease received materially less forward commercial commentary than obesity/diabetes in the four calls. Official milestone evidence fills the factual gap: etavopivat’s HIBISCUS trial met both co-primary endpoints and Novo plans a first filing in H2 2026; zaltenibart was licensed with a planned global phase 3 programme; and denecimig/Mim8 was submitted in the US and EU. No management-provided five-year rare-disease sales or margin target was found.

Consolidated outlook, margin, cash and capacity anchors

Date / source	Disclosed anchor	Forecast use
2026-08-04 Q2 presentation	Adjusted 2026 sales growth 0% to (6%) CER; adjusted operating profit growth 0% to (6%) CER	Current full-year range; not a five-year CAGR
2026-08-04 Q2 presentation	Tax 21%-23%; financial items net loss about DKK 1.1bn	Below-line and tax schedules
2026-08-04 Q2 presentation	PP&E capex about DKK 55bn; FCF DKK 45-55bn	2026 cash conversion and investment anchor
Q2 2026 presentation	Adjusted Q2 gross margin 78.2%; adjusted operating margin 42.5%	Excludes 340B reversal and DKK 6.3bn pipeline impairment
FY2025 annual report	Gross margin 81.0%, down from 84.7%	Catalent depreciation, restructuring/capacity cost and FX offset positive GLP-1 mix
2026-03-02 Athlone release	EUR 432m / about DKK 3.2bn tableting expansion	Additional oral GLP-1 capacity outside the US; no dose count disclosed
FY2025 annual report	About USD 2bn US manufacturing invested in 2025; further USD 5.6bn planned toward 2028	Supply expansion is capital intensive and multi-year

Pricing/reimbursement remains the most material disclosed commercial headwind. Q1 adjusted sales fell 4% at CER despite GLP-1 volume growth; Q2 improved to +7% adjusted CER. Gross-to-net timing produced the DKK 26.760bn H1 340B reversal and makes statutory quarterly growth a poor steady-state proxy. Direct cash channels, telehealth, broader payor access and lower prices may expand demand; they may also reset realised price and mix. Downstream scenarios should independently flex volume, net price, gross margin and commercial investment.

7. Capital allocation history

Year	PP&E capex, DKK bn	Capex / revenue	R&D, DKK bn	R&D / revenue	Buybacks, DKK bn	Dividends attributable to FY, DKK bn	M&A / BD cash, DKK bn	Source
FY2021	6.335	4.5%	17.772	12.6%	19.447	23.711	18.283 acquisitions	Official annual report / workbooks; live FMP IS/CF
FY2022	12.146	6.9%	24.047	13.6%	24.086	27.950	7.075 acquisitions	Official annual report / workbooks; live FMP IS/CF
FY2023	25.806	11.1%	32.443	14.0%	29.924	41.987	0.000 acquisitions	Official annual report / workbooks; live FMP IS/CF
FY2024	47.164	16.2%	48.062	16.6%	20.181	50.683	82.163 Catalent sites	Annual Report 2024; live FMP IS/CF

Year	PP&E capex, DKK bn	Capex / revenue	R&D, DKK bn	R&D / revenue	Buybacks, DKK bn	Dividends attributable to FY, DKK bn	M&A / BD cash, DKK bn	Source
FY2025	60.140	19.5%	52.039	16.8%	1.388	51.975	29.973 intangible / BD purchases, mainly Akero	Annual Report 2025; official workbook; live FMP IS/CF

Capex is the official PP&E line, not FMP's PP&E-plus-intangibles aggregation. The FY2024 M&A row is the cash consideration for three former Catalent fill-finish sites, including hedging effects. FY2025's Akero transaction was reflected primarily in purchases of intangible assets; that DKK 29.973bn is a business-development cash proxy, not a conventional business-combination line. The annual dividend series is attributable to each earnings year and aligned to the issuer's declared total dividend per share; it is not the cash-flow-statement disbursement within that fiscal year, whose timing differs. Share repurchases collapsed in FY2025 while Novo absorbed Catalent financing and a record capacity build.

The issuer's capital-allocation order is internal R&D and production capacity, an attractive annual dividend, business development to add pipeline, then flexible share buybacks. The Q2 2026 presentation says the 2025 dividend per share rose 2.6% to DKK 11.70, the thirtieth consecutive annual increase. A 12-month 2026 repurchase programme of up to DKK 15bn began in February; it may be reduced for material business-development opportunities. Total 2026 cash returns were expected to exceed DKK 60bn, including the final FY2025 dividend, up to DKK 15bn buybacks and a DKK 3.75 interim dividend per share.

Cash conversion needs consistent definitions. Before 2026, Novo's issuer-reported non-IFRS FCF included intangible purchases, acquisitions, selected financial assets and lease repayments. From 2026, it defines FCF as operating cash flow less PP&E. QF restated comparable TTM OCF to DKK 132.774bn and subtracts DKK 56.043bn PP&E for DKK 76.731bn TTM FCF. The Q2 2026 official outlook is DKK 45-55bn FCF with about DKK 55bn PP&E capex; the forecast decline from TTM reflects 2026 timing, US gross-to-net cash effects and continued investment.

8. Balance-sheet snapshot

FY2025

Item	DKK bn	Source
Cash and equivalents	26.464	FY2025 workbook / live FMP BS
Short-term investments / marketable securities	0.498	FY2025 workbook / live FMP BS
Total borrowings including leases	130.958	FY2025 workbook; QF P6
Lease liabilities	8.572	FY2025 workbook; QF P6
Issuer net debt excluding leases	95.424	Current + non-current borrowings ex leases, less cash and securities
Net debt / EBITDA	0.64x	DKK 95.424bn / FMP EBITDA DKK 149.439bn
Goodwill plus intangible assets	130.053	Live FMP BS; goodwill not separately populated in FY2025 FMP row
Shareholders' equity	194.047	FY2025 workbook / live FMP BS
Tangible book value	63.994	Equity less goodwill and intangible assets

At 30 June 2026, cash was DKK 44.482bn, marketable securities DKK 0.500bn, gross borrowings including leases DKK 140.127bn, lease liabilities DKK 8.622bn, issuer net debt excluding leases DKK 86.523bn and equity DKK 221.277bn. Source: H1 2026 official workbook and QF P6. Net debt remains modest relative to earnings, but gross debt and intangible assets are materially above pre-Catalent levels. The goodwill/intangible classification should be rechecked in valuation preflight because FMP's FY2025 normalised row places the acquired-asset balance in intangibles and shows zero separate goodwill.

9. Recent corporate actions and operational events

- **2025-09 to 2025-11 - company-wide transformation.** Novo booked roughly DKK 9bn of Q3 costs and about DKK 8bn for FY2025, streamlined operations and redirected savings toward growth. The [Q3 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916445) shows that operating-profit growth would have been materially higher without the restructuring. This is a discrete normalisation item, not a permanent margin add-back without evidence that savings persist.

- **2025-10-09 / 2025-12-09 - Akero acquisition announced and completed.** Novo paid USD 54 per share, aggregate USD 4.7bn, plus a non-transferable CVR worth up to USD 0.5bn upon a specified efruxifermin MASH approval. [Completion release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916467). Efruxifermin broadens the MASH pipeline and increases 2026 R&D costs; it contributes no current product revenue.
- **2025-10-15 - Omeros zaltenibart transaction.** Novo agreed to exclusive global rights for the MASP-3 inhibitor, with USD 340m upfront/near-term payments and up to USD 2.1bn total milestones plus royalties. [Official release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916434). A global phase 3 PNH programme was planned after closing.
- **2025-11-14 - extraordinary board renewal.** Seven incumbent directors stepped down and four were elected. The 2025 governance report stated only two of five shareholder-elected directors were independent immediately after the EGM, with a stated plan to restore a majority at the March 2026 AGM. Current [governance disclosure](https://www.novonordisk.com/about/corporate-governance.html) lists eight shareholder-elected and four employee-elected directors.
- **2025-12 to 2026-07 - Wegovy format approvals.** Wegovy pill received US approval in late 2025; Wegovy 7.2mg / HD launched in the US in April 2026; the EU authorised both oral semaglutide 25mg and a single-dose 7.2mg pen in July. [EU approval release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916582). These formats expand addressable demand but have different cost and price economics.
- **2026-02-03 / 2026-02-04 - negative initial outlook and repurchase programme.** Novo initially guided adjusted 2026 sales and operating-profit growth to (5%)-(13%) CER and launched a 12-month repurchase programme of up to DKK 15bn. [Repurchase release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916486). The programme is subordinate to significant business-development opportunities.
- **2026-02-04 - executive-team changes.** Jamey Millar became EVP US Operations and Hong Chow joined as EVP Product & Portfolio Strategy after Dave Moore and Ludovic Helfgott left. CFO Karsten Knudsen remained in place. These changes followed Mike Doustdar's August 2025 CEO appointment and the 2025 board reset.
- **2026-03-02 - oral GLP-1 manufacturing investment.** Novo announced EUR 432m, about DKK 3.2bn, to upgrade and expand its Athlone, Ireland tableting facility for current and future oral GLP-1 products serving markets outside the US. [Official release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916508). No physical dose capacity was disclosed.
- **2026-04-20 - etavopivat HIBISCUS success.** The phase 3 sickle-cell study met both co-primary endpoints, with a 27% reduction in vaso-occlusive crises and improved haemoglobin response; Novo planned its first regulatory filing in H2 2026. [Official release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916533).
- **2026-05 to 2026-08 - guidance raised twice as GLP-1 momentum improved.** Q1 guidance moved to (4%)-(12%) adjusted CER; Q2 moved to 0%-(6%). The final range still embeds pricing pressure. H1 reported results include the DKK 26.760bn 340B reversal; Q2 reported profit includes DKK 6.328bn of pipeline impairments.
- **2026-08-04 - ZEUS failed its primary endpoint.** The Q2 release disclosed that ziltivekimab's cardiovascular-outcome phase 3 trial did not meet its primary endpoint. This removes a previously highlighted pipeline opportunity and supports keeping pipeline value risk-adjusted.

Share-class and foundation governance

Governance item	Current disclosed fact	Modeling / stewardship relevance	Source
A shares	1,075m unlisted shares; 100 votes per DKK 0.10 share	Held by Novo Holdings; cannot be divested under Foundation statutes	Annual Report 2025
B shares	3,390m shares; 10 votes per DKK 0.10 share	Copenhagen B share is the security underwritten; ADR excluded	Annual Report 2025
Foundation control	Novo Holdings / Foundation: 28.1% of capital, 77.3% of votes	Stable control and long horizon, but minority B holders cannot change control	Annual Report 2025

Governance item	Current disclosed fact	Modeling / stewardship relevance	Source
Dividends	A and B have legal preference bands; in practice same dividend per share	Economic share conversion is 1.0 for the sealed quote packet	Annual Report 2025
Free float	94.13% of listed B shares at FY2025; about 15.31% of B shares represented by ADRs	Supports liquidity; does not change local B-share unit economics	Annual Report 2025
Diluted share trend	4,605.3m FY2021 to 4,447.7m FY2025; 4,442.2m H1 2026	Buybacks more than offset employee dilution historically	Official statements / QF P6

The related-party Catalent-site acquisition was approved by Novo's board and supported by an Evercore fairness opinion. Foundation control and cross-board relationships remain governance considerations even though the B share receives the same practical dividend per financial share.

10. Open data gaps and classification

Classification	Gap	Sources and search terms checked	Consequence / treatment
True non-disclosure	Brand-level net realised price, gross-to-net rebate, unit volume and product-level margin history	Annual Report 2025; FY2021-FY2025 and Q1/Q2 2026 workbooks; searches `realised price`, `rebate`, `volume`, `product margin`	Flex price, volume and margin separately; do not infer from list price
True non-disclosure	Physical production capacity in doses by API, fill-finish site, product and year	Annual report capacity sections; Q2 deck; Athlone and other capacity releases; searches `capacity`, `API`, `fill-finish`, `tableting`, `doses`	Use capex/project timing and management supply comments, not invented dose capacity
True non-disclosure	Separate sales for products listed only inside group footnotes	Annual workbooks; searched NovoEight, Esperoct, Refixia, NovoThirteen, Alhemo, Norditropin, Sogroya, NovoNorm, needles, GlucaGen	Retain issuer group totals; no back-solving
True non-disclosure	Wegovy versus Saxenda dollars in FY2021	FY2021 `Sales Q4` / 12M table; searched `Wegovy`, `Saxenda`, `Obesity care`	FY2021 remains combined DKK 8.400bn; separate series starts FY2022
True non-disclosure	Clean five-year prescription, patient-start and market-share series on one basis	Annual reports and investor decks; searched `TRx`, `NBRx`, `volume share`, `value share`, `patients reached`	Use point-in-time snapshots only; do not interpolate
True non-disclosure	Reportable-segment cost of sales, R&D, S&D and admin allocations	Annual/interim `IS & OCI`, segment note; searched each expense by segment	Forecast exact Segment operating profit margin directly; no analyst cost allocation
Source limitation - text transcript unavailable	Text transcript for Q2 FY2026 earnings call	Live FMP transcript queries for `NOVO-B.CO`, `NVO.CO` and `NVO` all returned `[]`; official [webcast recording](https://edge.media-server.com/mmc/p/gvkwhsby) found, but no official text transcript exposed	Section 6 uses the official release/presentation for Q2; no Q2 call-only dialogue is quoted
Estimated	ROIC series	Live FMP IS/BS and official statements; formula disclosed in Section 2	Calculation, not issuer KPI; exact numerator and denominator shown
Estimated	Q3/Q4 2025 quarter-only segment profit and margin	Official 9M/FY segment statements and H1 comparator	Arithmetic differences only; no unknown plug
Estimated	TTM product, segment and statutory values	QFR-sealed FY2025 minus H1 2025 plus H1 2026 evidence	Exact arithmetic; all statutory residuals zero
Not applicable	P&C ownership-perimeter, solvency and fee-count-once schedules	Business classification and annual report	Novo Nordisk is not a P&C insurer or reinsurer

No open segment-profit-to-statutory-operating-income gap exists. The exact FY2025 and TTM bridges reproduce the QFR-sealed packet, both validators pass, and every residual is zero. No product dollars in this file are back-solved. The only source-format limitation is the unavailable Q2 2026 text transcript. The official release, presentation, webcast link and quantitative workbook were all fetched live and provide sufficient primary-source coverage for the Q2 financial, guidance and prepared-management evidence used here; no Q2 call-only dialogue is quoted.

D self-verification

Load-bearing check	Live evidence	Result
Largest segment’s latest-quarter growth	Q2 workbook and [Q2 release](https://www.novonordisk.com/news-and-media/news-and-ir-materials/news-details.html?id=916590): Obesity and Diabetes care DKK 73.581bn; adjusted sales +7% CER	PASS
Management quote	Q1 FY2026 live FMP transcript dated 2026-05-06; Mike Doustdar: “Price is dynamic and a function of volume uptake.”	PASS; date matches call
FY2025 revenue	Live FMP annual income statement for `NOVO-B.CO`: DKK 309.064bn; official FY2025 workbook DKK 309.064bn	PASS; 0.0% gap

Research only. No ranking, sizing, portfolio mutation, message, broker, order or trade is authorised. `trade_execution_authorized=false`.